VIII

IMPERIAL SECRETARIAT LIBRARY

ANNUAL REPORT

ON

LABOUR IMMIGRATION INTO ASSAM

FOR THE

Year 1887.

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INDEX.

CHAPTER I.—GENERAL.

	Para	Page.
Transit of immigrants to the Assam Valley	1	1
" " to the Surma Valley...	2	*ib.*
Working of the Act	3	2
Debarkation depôts	4	5
Relations of employers and labourers	5	*ib.*
" between tea-garden population and villagers ...	6	6
Wages	7	7
Offences committed by tea-garden population	8	8
Expiry and cancelment of contracts	9	10
Repatriation of labourers	10	11
Settlement of time-expired garden labourers on the land ...	11	12

CHAPTER II.—INSPECTION.

Number of gardens submitting returns	12	*ib.*
Classification of gardens according to the labourers employed, and inspection of Act and non-Act gardens	13	*ib.*

CHAPTER III.—STATISTICS OF THE YEAR'S IMMIGRATION.

Provincial figures	14	14
District and Valley statistics	15	*ib.*
Nationality of immigrants	16	15
Female immigrants	17	16
Contractors' and sardári labourers...	18	*ib.*

CHAPTER IV.—LABOUR CONTRACTS.

Number of contracts made	19	17
Nationality of labourers making local contracts	20	*ib.*
Details of local contracts	21-22	18

CHAPTER V.—LABOUR FORCE.

Statistics of the labour force	23	19
Mean strength of the labour force	24	20
District figures of the labour force	25	*ib.*
Nationality of the adult labour force	26	21
Mean strength in each district	27	*ib.*

CHAPTER VI.—DESERTIONS.

Provincial and district figures	28	22
Arrests and convictions	29	*ib.*
Nationality and sex of deserters	30	23

CHAPTER VII.—MORTALITY IN TRANSIT AND ON GARDENS.

Mortality at Dhubri and during transit on the Brahmaputra ...	31	23
Mortality during transit to the Surma Valley districts ...	32	*ib.*
Death-rate for the year	33	24
" among adults	34	*ib.*
Causes of death among Act and non-Act coolies	35	25
Death-rate among children	36	26
Order of demerit as regards death-rate	37	27
Nationality according to the country of origin	38	*ib.*

CHAPTER VIII.—UNHEALTHY GARDENS.

Proportion of unhealthy gardens in each district	39	*ib.*
Unhealthy gardens in Sylhet	40	28
" " Cachar	41	29
" " Lakhimpur	42	30
" " Sibságar	43	34
" " Nowgong	44	36
" " Darrang	45	37

CHAPTER IX.—BIRTHS.

Birth-rate	46	39
" according to nationality	47	40
Portions of Sanitary Report for 1887 re-produced as Appendix	48	41
Statement—		
Return showing statistics of the labour force of the tea-gardens in the Province during 1887		42
Appendix		44

BENGAL SECRETARIAT LIBRARY

REPORT ON LABOUR IMMIGRATION INTO ASSAM FOR THE YEAR 1887.

CHAPTER I.

GENERAL.

Transit of immigrants to the Assam Valley

1. DURING the year under report recruiting for the Assam Valley districts was unusually brisk, the number of emigrants who started from the recruiting districts for Dhubri having risen from 18,069 in the previous year to 25,647. The increase, as compared with the year 1886, is therefore 7,578, or 41·93 per cent., and the total nearly reaches that of the year 1884 (26,586), which is the largest on record. Of the number who started from the recruiting districts, 25,635 arrived at Dhubri, against 18,059 in the previous year. The percentage of arrivals at Dhubri to departures from the districts of recruitment was therefore more than 99·9 in both years. Of the immigrants who arrived at Dhubri, the large majority (15,447), accompanied by 5,876 dependants, were free immigrants in the legal sense, that is, they were immigrants supplied by unlicensed contractors, or garden-sardárs, who are technically free immigrants until they reach Dhubri, where they are placed on contract under Section 111, and are thus brought under the Act. It is necessary to explain that these persons are classed in the returns furnished by managers of gardens as "contractors' coolies," though they are not supplied by contractors licensed under the Act. The remainder of the immigrants who arrived at Dhubri may be classified as (1) those, 3,784 in number, recruited by garden-sardárs, and (2) free immigrants who did not enter into contracts at Dhubri, and who numbered 528. No contractors' coolies, properly so called, passed through the Dhubri depôts during the year. The statistics regarding the duration of the contracts entered into at Dhubri under Section 111 of the Act, and regarding the health of the immigrants at Dhubri and during transit up the Brahmaputra, will be noticed in their proper place (*see* Chapters IV. and VII., paragraphs 21 and 31 respectively). During the year under report the immigrants came to Dhubri by one route only, that is *viâ* Sitarampur, Raniganj, and Calcutta by the East Indian, Eastern Bengal, Northern Bengal, Kaunia and Dharla Railways, to Kaunia and Jatrapur, and thence by steamer to Dhubri. In addition to the above, 859 immigrants, against 984 in the previous year, were shipped at Goalundo for tea-gardens in the Assam Valley districts. Immigration by this latter route is steadily decreasing, though it is possible that it may revive to some extent owing to the facilities now offered by the more frequent departure of steamers from Goalundo, and to the fact that it involves fewer changes than the Kaunia-Dhubri route. Immigrants are carried both from Goalundo and Dhubri in the fast steamers of the weekly or daily services, the larger and slower steamers being now employed in the cargo traffic only, and at Dhubri undue detention in the depôts is prevented by a rule which requires agents to ship coolies by the first steamer offering, provided the vessel complies with the requirements of the Inland Emigration Act. The average time occupied by immigrant-carrying steamers in transit between Dhubri and Dibrugarh was five and a half days.

Transit of immigrants to the Surma Valley

2. Owing to the fact that there is no point between Goalundo and the ports of debarkation in the Surma Valley which corresponds with Dhubri, where the very large majority of immigrants to the Assam Valley districts are registered *en route* to their destinations, and owing to the further fact that the greater portion of the immigrants to the Surma Valley are conveyed in small unlicensed country boats, over which it is scarcely possible to exercise any real control, and from which immigrants are in many cases landed at places where regular depôts have not been established, it is obvious that the same facilities do not exist as in the Assam Valley for procuring accurate information, independently of the returns supplied by garden managers, of the yearly flow of newly-arrived immigrants into the Surma Valley. A further fact which tends in the same direction is that free immigration, properly so called, takes place to the Surma Valley to a greater extent than to the Assam Valley, and of this immigration no record in many cases exists apart from that which is kept by the managers of gardens. In progress of time it may be hoped that larger resort

will be had by employers of labour to the fast daily steamer service from Goalundo to Silchar which was started in the beginning of the year under report, and it is satisfactory to find from figures supplied by the Deputy-Commissioner of Cachar for the year 1888 that the number of coolies carried by steamer is, in fact, increasing and that the service is rapidly becoming more popular. The district officers are agreed that the main objection to the use of steamers is that of expense. A passage by steamer from Goalundo to Silchar costs Rs. 8-14, while the fare by country boat is Rs. 2 only; and there is reason to believe that this additional expense often outweighs the consideration of the saving in time and cost of maintenance and of the greater safety which transit by steamer must necessarily involve. A minor objection to the use of steamers is the change to boats or to a land journey from Fenchuganj, which is unavoidable in the dry season, when the vessels do not run above that point. All possible steps will be taken to minimize these objections, and in the meantime efforts are being made to improve the registration at the debarkation depôts, to open more depôts where necessary, and generally to collect more complete statistics than has hitherto been found possible. An attempt was made during the year to ascertain from the steamer agents statistics regarding the number of immigrants carried by steamer, but the agents reported their inability to supply such information, as coolies are not distinguished in their returns from other third-class passengers. On the present occasion therefore,—and as the only information available in regard to the mode of transit adopted by the immigrants is confined to persons passing through the depôts, which for the reasons above explained is necessarily defective,—the figures are far from being as complete as could be desired. Thus in Sylhet the number of immigrants who arrived during the year under report was, according to the managers' returns, 5,914, of whom only 2,651 passed through the depôts, the balance representing free labour (which may or may not have been placed under contract on arrival at the garden or at a later stage), or immigrants brought up under the Act who were not registered at the depôts. Of this total all that can be said with certainty is that 122 batches, consisting of 1,030 immigrants and 251 dependents, came by steamer. Similarly, in Cachar, while the number of new arrivals as returned by the managers aggregated 4,522, the number who passed through the depôts was 2,685 only, and of these, 7 batches, containing 77 coolies, came by steamer. As above stated, these figures are clearly defective; but it is hoped that the report for 1888 will include more complete particulars under this head. As a whole, the number of immigrants into the Surma Valley districts during the year under report decreased, according to the garden returns, from 12,050 in the previous year to 10,436, or by 13·3 per cent. This result, which offers a curious contrast to that in the Assam Valley, is mainly due to a falling off in the number of immigrants to Sylhet from 7,445 in the previous year to 5,914 in the year under report, and the Deputy-Commissioner ascribes it to the fact that "the demand for labour caused by sudden and extensive reclamations has been pretty well supplied." In Cachar, on the other hand, there was no considerable difference between the figures for the two years, the immigrants having numbered 4,522 in 1887, against 4,605 in 1886. The statistics regarding mortality amongst the immigrants to the Surma Valley during the journey from the districts of recruitment will be shown later on in this report (see Chapter VII., paragraph 32).

Working of the Act.

3. This seems the most convenient place to speak of the working of the system of so-called "free immigration."

It must be admitted that that system has worked in a manner very different from what was contemplated by its authors. It is easy for those who are wise after the event to say that this ought to have been anticipated; but it may well be doubted whether any such persons, if they had assisted at the passing of the Act of 1882, would have anticipated what as a matter of fact has happened.

It was thought that the time had arrived when emigrants might be expected to come to Assam in large numbers without much assistance, or at all events without the stimulus and aid of the elaborate organisation then provided by the professional supplier of labour, and that the system of contractors, *arkattis*, and so forth, would in time die a natural death; but, instead of this, the great and ever increasing mass of the labour supply business has remained in the hands of the professionals, with this difference, that, whereas formerly these persons worked under strict regulation and control, they now under the "free emigration" system work free from all control. As a result, certain evils, more or less incident to any system of emigration, have been considerably aggravated.

In the first place we have had in the severe outbreak of cholera which occurred in the early part of the present year,* causing a lamentable sacrifice of human life and

* Judicial Department Resolution No. 2,575, dated the 7th September 1888, published in the *Assam Gazette* of 8th September 1888.

most serious pecuniary loss to planters or suppliers of labour, an illustration of the danger of allowing immense masses of emigrants to be transported to Assam without any means of enforcing the most ordinary sanitary precautions; but on this point the Chief Commissioner will not dwell here, as it does not appertain to the year under report. In the second place, the free recruiting system has undoubtedly given rise to a not inconsiderable number of cases of forcible kidnapping, and fraudulent enticement of labourers by the understrappers of the professional dealer. As to the nature and extent of this mischief, Mr. Fitzpatrick, having so recently taken charge of the administration, is unable as yet to express any very definite opinion. Moreover, the matter has only recently attracted the attention it deserves, either here or in Bengal, and most of the cases that have been taken up being still under enquiry in Bengal, there is but little information in the Assam offices regarding them. The following, however, are the conclusions to which the Chief Commissioner is disposed to come provisionally and pending further inquiries which he is making. As regards forcible kidnapping, the charges have commonly proceeded from employers of labour in Bengal or their recruiters, who have alleged that coolies proceeding to an estate in Bengal have been forcibly seized by the servants of a professional contractor, confined in a depôt for Assam emigrants, and, perhaps, ultimately carried off to Assam. That considerable numbers have been so seized and confined in Bengal seems beyond a doubt from some reports of Bengal officers which the Chief Commissioner has seen; but so far as Mr. Fitzpatrick is aware, though charges of carrying the coolies forcibly to Assam, and settling them on plantations there, have been made, no such charge has as yet been substantiated, and he must say that it seems to him that the story told in some of these cases is extremely improbable. (In what is called the Tiphuk case, *e.g.*, the papers of which the Chief Commissioner has before him at this moment, it is alleged that fifty coolies were by force seized in Bengal, carried to Dhubri, made to execute contracts there, then carried up to the Tiphuk estate in Sibságar, and settled there, and that, though they were within easy reach of the district head-quarters, and the Deputy-Commissioner visited the plantation, they never breathed a word of their grievance to anybody until months later, when, a complaint having been made by the Bengal employer who had been deprived of their services, a regular enquiry was instituted.

Now it is, the Chief Commissioner admits, conceivable that these men may, in the first instance, have been forcibly seized, but that all the rest could have been effected by force, or even by intimidation, passes belief. It seems to him, so far as he can venture to conjecture, that the probability is that these coolies and their sardárs were paid for abandoning the service for which they had been engaged, and that when the matter came to be enquired into, they thought it best (the coolies acting under instructions from the sardárs) to make out that they had acted under compulsion throughout. An alternative suggestion, and not an improbable one, is that they were deceived by false representations as to the advantages they would enjoy in Assam, but that, however simple and timid they may be, they were under compulsion, whether physical or moral, throughout, it would be most difficult to believe. However this may be, the Chief Commissioner is inclined to think that now that attention has been fully directed to the matter, we have not much to fear in the future from anything in the way of kidnapping, properly so called.

He is inclined to regard the danger from enticement by fraudulent means as on the whole a more serious one; but this, too, he is disposed to think, is apt to be much exaggerated. The entire number of cases in which there was even a suggestion that coolies had been enticed to the Assam Valley during the year 1887, and of which the Chief Commissioner has been able to hear anything, was about 26, against an immigration of upwards of 25,500. Of these, seven were simply cases in which a woman having been abducted somewhere up country, and a reference having been made to the Deputy-Commissioner, Dhubri, on the mere chance of something having been heard of her there, it was reported that nothing had been heard. Two were cases in which it appeared that whatever ground the husband or other members of the family might have had to complain, the immigrants had come of their own free will, and not under the influence of any deception. In eight other cases no trace whatever has been found of the person or persons alleged to have been enticed to Assam, and all that can be said is that they may or may not be cases in which persons were induced to come here by the fraudulent representations of a recruiter. Of the remaining cases, about ten in number, four have been disposed of by the courts in Bengal, one resulting in conviction and three having been dropped. The other six are still under inquiry, chiefly in Bengal, and, owing to the absence of any regular system in dealing with such cases here (a matter which has now been corrected) the Chief Commissioner is unable to say anything regarding them beyond this, that some of them are likely to be true.

There is one sort of enticement case of which the Chief Commissioner himself has learned something since his arrival here, and to which, as it seems to be to a certain extent typical and to have given a peculiar tinge to the discussion of this subject in the hands of writers for the native press, it may be desirable more particularly to refer. It is that of the female waif or stray, the woman who has been deserted by her husband, the woman who has left her home after a quarrel, the first wife who has been superseded by a second, the wife of a Coolin Brahman, and such like. Such women are often ready almost to go anywhere with anybody and to do anything, and they seem not unfrequently to fall victims to the professional *arkatti* or recruiter. It may safely be said, however, that at least such of them as are of superior caste would not willingly go to labour on a tea-garden. They have accordingly to be deceived by some false representation, and they are probably told that a home will be provided for them either as domestic servants or in a less honourable capacity, or perhaps the person who enlists one of them tells her that he will himself marry her or keep her as his mistress. All then goes well till they reach Dhubri, and it is conceivable that, notwithstanding the care taken there in the attestation of contracts, a woman may sometimes be got through by being told that the attestation means nothing, and by thus being persuaded to give the required answers. It is only when she is put on board the steamer and her deceiver leaves her that she is brought to understand what is before her, and the deception comes to light. Unfortunately, one of these women, when her case comes to be inquired into, is apt, probably under the tutoring of others, to tell a story altogether false in its details. She is a person of unimpeachable respectability, she was led to believe that she was being taken to her husband or some other member of her family, she was forcibly carried away or concealed on the route, she never appeared before any medical or other officer either in Calcutta or Dhubri, and so on. The result is that, on the one hand, there is a risk of her story being altogether disbelieved, and, on the other, there is a risk of its being invested with a sensationalism which fixes the attention of the public, and thus leads to this matter of enticement of coolies being regarded as a much commoner incident of the emigration system than it really is. The matter is nevertheless one calling for serious attention, and the Chief Commissioner has issued instructions to the Deputy-Commissioner of Dhubri and also to officers attesting contracts under Section 111 of the Act for the special and separate examination of female recruits unaccompanied by a husband, which, he trusts, will have the effect of checking the evil to some extent.

As regards other classes of the immigrant population, it is manifest that the immense mass of them, coming, as they do, from localities from and to which there is a constant stream of labourers going and returning, could scarcely be imposed upon by any misrepresentation as to the nature of the life before them; but there must be always a certain proportion of persons from localities tapped for the first time, or of recruits picked up by chance whom it would be very easy to deceive, and who, so long as the present absolutely uncontrolled system continues, are, it is to be feared, often deceived, not perhaps in the precise manner stated by themselves or by writers in the press, but in a manner still harder to bring home to the guilty parties, *viz.*, by simple misrepresentations as to the nature and advantages of the life which lies before them.

For this reason, and, quite as much if not more, from a regard to the necessity of some system of sanitation and protection for large masses of emigrants *en route*, the Chief Commissioner is glad to learn that the matter of the so called "free emigration" is being taken in hand by the Government of Bengal, which controls the recruiting areas.

The reports received from district officers contain passing references to the working of particular sections of Act I. of 1882; but the Chief Commissioner, in the absence of any necessity for taking immediate action in regard to the points noticed, would prefer to postpone the discussion of such matters until the working of the Act, as a whole, comes under review. In the meantime, Mr. Fitzpatrick feels bound to say, with reference to the complaints which are not unfrequently made in connection with the procedure adopted at Dhubri, that from the enquiries he has had occasion to make, his belief is that all reasonable care is taken at Dhubri to see that the immigrants understand the contract, and he can scarcely believe it possible that, except under very peculiar circumstances, any immigrant registered there should not know where he is going. No doubt, misrepresentations may be, and probably are, made more or less frequently as to the nature of the labourer's position, and so forth; but that is an evil to some extent inseparable from any system of emigration, however conducted.

With these preliminary remarks, Mr. Fitzpatrick proceeds to notice the more important matters connected with the working of the Act during the year 1887 which are dealt with by the district officers, the order in which the various subjects are treated being, with few exceptions, the same as those adopted in previous reports. He would, however, explain that in future reports he proposes to modify in some respects the manner of treatment applied so as to record the results in what appears to him to be a more convenient form.

Wages

7. As stated in last year's report, inspecting officers were directed to show in their inspection reports the rates of wages for two months, one in the cold season, when work is slack and earnings are small, and one in the rains, when work is brisk and earnings are large. Unfortunately, this order has not been fully complied with, except in the districts of Sylhet, Sibságar, and Nowgong. Renewed instructions will be issued on this point, and also in regard to the collection of information from planters and managers as to the total sums actually disbursed to the labour force in the several gardens. With two exceptions (Nowgong and Darrang), the reports received from district officers for 1887 are entirely silent on the point last mentioned. As in previous years, the statement of wages, based on the inspection reports, is given below:—

			Monthly wages. Average. Rs. As. P.	Monthly wages. Highest. Rs. As. P.
North Sylhet (41) ...	Act ...	Men	3 13 0	6 12 3
		Women	3 0 7	6 5 4
	Non-Act ...	Men	4 11 6	10 2 0
		Women	3 7 11	8 4 10
		Children	2 1 4	4 3 2
South Sylhet (38)...	Act ...	Men	4 9 3	16 4 0
		Women	3 11 0	14 10 0
	Non-Act ...	Men	4 6 0	21 2 0
		Women	3 11 9	19 8 0
		Children	2 4 0	8 15 0
Karimganj (30) ...	Act ...	Men	3 15 6	5 9 3
		Women	2 14 1	4 3 11
	Non-Act...	Men	4 6 7	7 9 1
		Women	3 11 6	8 10 10
		Children	2 7 10	4 12 2
Habiganj (10) ...	Act ...	Men	4 13 3	7 5 1
		Women	3 14 4	6 4 3
	Non-Act ...	Men	4 8 10	7 5 5
		Women	4 5 9	8 13 9
		Children	1 14 11	4 8 8
Cachar (50) ...	Act ...	Men	4 0 4	8 6 5
		Women	3 3 4	7 11 5
	Non-Act ...	Men	4 10 7	8 5 2
		Women	3 8 1	8 7 10
		Children	2 3 9	4 13 3
Lakhimpur (182) ...	Act ...	Men	6 9 1	7 9 9
		Women	4 5 5	6 10 7
	Non-Act ...	Men	6 12 5	9 5 6
		Women	5 5 10	7 10 1
		Children	3 7 4	4 13 4
Sibságar (156) ...	Act ...	Men	4 4 10	7 1 11
		Women	3 15 6	6 4 3
	Non-Act ...	Men	4 1 9	9 6 0
		Women	3 1 3	7 13 8
		Children	2 1 1	4 2 0
Nowgong (40) ...	Act ...	Men	5 5 9	14 15 9
		Women	4 10 10	10 4 9
	Non-Act ...	Men	5 14 0	12 11 9
		Women	5 2 2	14 6 6
		Children	2 12 0	7 7 0
Darrang (31) ...	Act ...	Men	4 7 6	6 2 11
		Women	3 3 6	6 9 1
	Non-Act ...	Men	6 2 4	12 4 6
		Women	3 12 9	11 10 8
		Children	2 5 3	4 13 1
Kámrúp (19) ...	Act ...	Men	3 9 3	5 12 6
		Women	3 4 9	5 10 0
	Non-Act ...	Men	3 3 10	6 8 9
		Women	2 12 2	5 2 6
		Children	1 9 6	3 12 0

As the above figures have not been calculated on a uniform basis, and in some cases do not include advances and money paid for ticca work, they are incomplete, and comparison with last year's statistics would not give any reliable results. It may be added that even if the statistics could be made complete and reliable, they would scarcely render it possible to arrive at a satisfactory conclusion as to the actual condition of the labourers, unless information could also be procured as to the other means of subsistence available to them, as, for example, by working for other employers or on land of their own at such times as the

planter is willing to dispense with their services. The Chief Commissioner will consider separately how this latter information can be obtained.

In Nowgong, the Deputy-Commissioner succeeded in procuring information from the managers of 23 gardens regarding the total expenditure, including ticca payments, as wages of the labouring force. The result of this information was to give an average monthly wage per head of Rs. 4-11-6, against Rs. 5-3-3, the corresponding average resulting from the inspection reports of the gardens concerned. The information thus collected must accordingly be defective, unless some error has been made in the inspection returns.

The Deputy-Commissioner of Darrang obtained from the managers of 31 gardens certain information regarding the wages earned by Act and non-Act coolies during one month in the manufacturing and non-manufacturing seasons respectively. The general result of this information is given in the following table:—

		Non-manufacturing season, monthly wages.		Manufacturing season, monthly wages.		Lowest average wages.	
		Average.	Highest.	Average.	Highest.	Non-manufacturing season.	Manufacturing season.
		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Act ...	Men	4 13 3	6 10 6	5 0 5	12 4 6	2 14 10	3 10 7
	Women.....	3 1 8	5 15 1	4 5 9	11 10 8	2 5 9	3 0 11
Non-Act...	Men	6 1 5	13 0 3	6 13 10	10 0 5	2 10 6	3 2 3
	Women.....	3 1 10	5 11 11	4 6 5	12 13 1	2 0 4	0 4 0
	Children ...	2 5 0	4 13 0	2 10 10	4 14 9	1 0 5	1 6 0

It should be added that the wages of non-Act coolies shown in the above statement do not include advances.

Offences committed by tea-garden population.

8. The following figures show the offences committed by the tea-garden population in each of the past two years under Act XIII. of 1859 and Act I. of 1882, respectively (excluding the offence of desertion, which is separately dealt with in Chapter VI.) :—

District.	Act XIII. of 1859.		Act I. of 1882.																			
			Section 151, garden-sardár failing to report himself.		Section 153, garden-sardár failing to comply with instructions endorsed on way-bill.		Section 154, master of vessel receiving native passengers on board in contravention of Act.		Section 163, employer refusing or omitting to keep registers, &c.		Section 171, labourer absent without cause.		Section 176, employer arresting labourer without sufficient cause.		Section 178, labourer guilty of habitual drunkenness or wilful disregard of sanitary regulations.		Section 183, enticing away, harbouring, or employing labourer under contract.		Section 188, employer refusing to endorse labour contract, &c.		Total.	
	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887	1886.	1887.	1886.	1887.	1886.	1887.
Sylhet	12	21	..	1	25	4	..	..	3	..	1	..	..	..	..	..	1	6	..	..	30	11
Cachar	18	9	2	1	1	..	..	..	..	..	2	6	..	..	1	1	11	12	..	..	17	20
Lakhimpur	22	28	..	..	..	..	..	..	..	..	..	2	..	..	..	..	4	5	..	..	4	7
Sibságar	43	15	1	2	..	..	..	..	..	..	5	8	1	1	1	..	7	5	..	..	15	16
Nowgong	7	5	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	4	..	..	2	5
Darrang.....	44	13	3	2	..	..	..	..	..	..	22	6	..	..	..	1	4	6	..	..	29	15
Kámrúp.....	20	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	166	97	6	6	26	4	..	..	3	..	30	23	1	1	2	2	29	38	..	..	97	74

The above figures show very considerable variations in all districts, except Lakhimpur and Nowgong, between the number of persons convicted during 1886 and 1887, respectively, under Act XIII. of 1859, and the Chief Commissioner regrets to observe that the explanations of these variations given in the district reports are generally insufficient, while in some cases no explanations at all have been supplied. A similar remark applies, though in a less degree, to the figures relating to offences under Act I. of 1882. Another matter which is altogether inadequately noticed in the district reports is in regard to the punishments actually inflicted for offences under each of the Acts, and yet this is a point of considerable

importance, because in many cases, especially under Act XIII. of 1859, conviction is not, as a matter of fact, followed by the infliction of any punishment at all, the coolies being merely directed by the magistrate to return to their gardens or to carry out their contracts. Mr. Fitzpatrick had wished to analyse in some detail the results shown in the above statement, which appear to him to possess considerable interest as illustrating the working of the two Acts in certain important particulars, and the extent to which managers resort to each Act for the purpose of procuring, when necessary, the punishment of their labourers. But any such analysis is wholly impossible on the present occasion, in consequence of the meagre information supplied in the district reports, and the Chief Commissioner must accordingly postpone any remarks under this head until the Provincial Report for the year 1888 comes to be written. In the meantime district officers will be instructed to deal with the subject more fully in future reports.

The following statement shows the offences committed in each of the past two year by the population of the tea-gardens against the general criminal law, that is, all crimina offences, except such as relate to Acts XIII. of 1859 and I. of 1882 :—

District.	Penal Code.																			
	Unlawful assembly and affray.	Rioting.	Culpable homicide or attempt to commit ditto.	Murder.	Attempt to commit suicide.	Assault	Causing hurt	Grievous hurt.	Theft.	Assisting in concealment of property	Criminal trespass.	Lurking housepass	House trespass.	House-breaking.	Dishonest misappropriation.	Dishonestly receiving stolen property.	Criminal intimidation.	Cheating.	Mischief.
T																			
of the d	10	..	1	..		5	8	..	12	..	1	..	..	..	..	8	.	1	1
Lakhimpur	11	18	..	3	1	6	4	.	29	..	..	2	2	.	1	24	..	..	1
Sibságar	..	16	1	1	4	18	2	2	20	..	1	..	..	6	2	3	..	..	..
Nowgong	5	6	1	..		8	6	.	18	..	2	..	..	4	1	3	..	1	2
Darrang	..	.	..	1	1	.	1	1	7	..	1	1	..	..	..	..	..	..	..
Kámrúp	10	5	..	1	.	3	4	.	10	..	5	..	..	..	..	1	2	..	1
	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	.	..	..
Total for 1887	36	45	3	6	6	40	25	3	96	.	10	3	2	10	4	39	2	2	5
Total for 1886	16	53	5	3	8	18	20	31	89	..	3	3	..	2	3	30	8	1	4

District.	Penal Code.—(*Concld*																			
	Obstructing public servant.	Criminal breach of trust.	Laying false complaint	Giving false evidence.	Counterfeit coin.	Unnatural offences.	Insult	Committing affray.	Wrongful confinement.	Offences against public tranquility	Contempt of lawful authority.	Offences relating to marriage.	Escaping from lawful custody.	Giving false information to public servant	Rash driving.	Total	Act V of 1861.	Offences under other Acts.	Grand total of all offences.
Sylhet	2	1	..	..	..	..	..	..	..	..	2	..	..	..	..	52	.	11	63
Cachar	..	2	..	..	..	1	..	..	..	1	1	.	..	..		107	58	3	168
Lakhimpur	..	3		..	..	..	..	..	..	..	..	..	.		..	79	..	48	127
Sibságar	..	2	4	3	..	..	2	..	..	..	..	..	3	..	1	72	..	3	75
Nowgong	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	13	..	..	13
Darrang	..	..	..	..	1	..	..	..	2	..	..	.	1	.	..	46	..	..	46
Kámrúp	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	.	..
Total for 1887	2	8	4	3	1	1	2	..	2	1	3	..	4	..	1	369	58	65	492
Total for 1886	..	5	2	3	3	..	3	13	..	..	..	1	3	1	..	340	58	38	436

The Chief Commissioner does not propose to offer any detailed remarks on the above figures. The total number of offences committed under the Penal Code was somewhat in excess of that for the year 1886; but the difference is inconsiderable. Increases under the heads of unlawful assembly and affray, assault, criminal trespass, and house-breaking were counterbalanced by decreases under rioting, grievous hurt, and committing affray. Some of the more important cases have already been referred to in paragraph 5 above. The other cases were all of an ordinary type, and none of those mentioned in the district reports were of such a character as to require special notice. As regards offences against Act V. of 1861, enquiry will be made why only one entry occurs, namely, for the

district of Cachar. In the case of the district of Kámrúp no offences are reported under any head, and the reason for this scarcely credible absence of crime among a considerable garden population will be ascertained.

The following table, which includes cases of desertion, compares the ratio of convictions to the tea-garden population for the past two years:—

District.	Mean adult garden population.		Number convicted of any offence.		Number sent to prison, Jail Report.		Ratio percentum of imprisonments to convictions.	
	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.
Sylhet	35,414	38,048	189	148	106	101	56	68
Cachar	46,931	48,726	291	367	216	288	74	78
Lakhimpur	34,704	36,149	214	264	178	167	83	63
Sibságar	44,120	46,370	210	314	154	271	73	86
Nowgong	8,775	8,843	55	52	53	40	96	76
Darrang	20,190	22,949	193	174	146	135	75	77
Kámrúp	1,938	1,933	47	6	25	3	53	50
Total	192,075	203,022	1,199	1,325	878	1,005	73	75

The last two columns of the above statement are of interest, as showing that one out of every four persons convicted during each of the years 1886-87, if punished at all, escaped with some punishment less severe than imprisonment.

Expiry and cancelment of contracts.

9. The following table shows the number of contracts which expired by lapse of time, the number of such contracts reported by managers as required by Section 141 of the Act, and the number of contracts which terminated in other ways:—

District.	Number shown in garden returns as time-expired.	Number of time-expired contracts reported under Section 141.	Number cancelled by Inspector under Section 111.	Number suspended by Inspector for temporary unfitness, Section 120.	Number cancelled by Inspector for permanent incapacity, Section 122.	Number made void by Committee by reason of unfitness of estate, Section 129.	Number cancelled by Magistrate under Section 140.	Number redeemed under Section 142.	Number dissolved by m consent.
Sylhet	2,875	2,846	4	...	34	14	...	1	21
Cachar	5,803	5,240	...	...	3	...	...	8	41
Lakhimpur	3,816	2,551	...	...	500	...	...	26	79
Sibságar	11,553	4,464	...	...	71	..	1	4	94
Nowgong	606	606	...	...	52	..	...	...	1
Darrang	3,364	2,209	...	...	30	...	...	1	...
Kámrúp	228	197	1	...	...	...	...	...	...
Total of 1887	28,245	18,113	5	...	690*	14	1	40	236
Total of 1886	28,157	14,986	126	9	379†	...	...	37	155

* 6 cancelled at depôt, *viz.*, 5 in Sylhet and 1 in Cachar. † 5 cancelled at depôt, *viz.*, 4 in Sylhet and 1 in Cachar.

Nowgong is again, as in previous years, the only district in which the requirements of the law in the matter of reporting the expiry of contracts are fully complied with by employers. The proportion of time-expired contracts unreported by managers has increased in Sylhet and Kámrúp. Other districts show an improvement. In Sibságar, which is still, as last year, the most backward district in this respect, upwards of half the time-expired contracts were not reported. It is clear that the requirements of the law are neglected in this district to an extent which cannot be tolerated, and the Chief Commissioner trusts that, as the matter has been brought plainly to the notice of employers by the Deputy-Commissioner, the results next year will correspond more closely with those attained in other districts The figures for Cachar, Lakhimpur, and Darrang are also still very far indeed from what they should be. The Chief Commissioner is glad to observe that in Sylhet the defaulters in Karimganj and South Sylhet were prosecuted.

No contracts were formally suspended by Inspectors under Section 120 on account of the temporary unfitness of labourers; but inspecting officers are bound to see that sick coolies receive subsistence allowance, and in practice sick diet is given to coolies in hospital without any formal order by the Inspector.

There has been a large increase in contracts cancelled under Section 122, owing to the permanent physical unfitness of the labourer. The increase occurred in all districts except Sylhet and Cachar. In Cachar, the section seems to be almost a dead letter. In Lakhimpur the number cancelled has almost doubled. The Deputy-Commissioner believes the large number cancelled to be due to the fact that contractors' coolies of poor physique are largely imported into the latter district. As Mr. Driberg observes, if employers would recruit through sardárs, and insist on previous medical examination, they would save themselves the expensive process of having the contract cancelled and paying the coolie three months' wages. The Deputy-Commissioner of Sibságar, Mr. Knox Wight, also points out that little use is made of Section 70 of the Act, which enables the employer to insist on previous medical examination of the labourers not only in regard to their fitness to undertake the journey to the labour district but also to labour therein. The explanation of the frequent omission to require previous medical examination is probably, as suggested by the Commissioner, that the manager who issues the certificate to the sardár is generally not the proprietor, and is anxious to reduce expenditure. But, however this may be, the Chief Commissioner must express his entire concurrence in the view put forward by Mr. Knox Wight, that so long as use is not made of the power conferred by law of providing for the medical examination of intending immigrants in the districts of recruitment, the responsibility for the consequences must devolve upon the managers of the gardens concerned. Mr. Fitzpatrick would take this opportunity of inviting the attention of proprietors of tea-gardens and Agents and Directors of Companies to the great desirability, in the interests of their labourers and themselves, of insisting on the previous medical examination of labourers in respect of their fitness to labour. If this precaution were generally adopted, it is certain that much future sickness, mortality, and expense would be avoided, and that many fewer gardens would be condemned as unsuited for labourers.

The contracts cancelled under Section 129 in Sylhet in consequence of the unfitness of the estate relate to a garden (Madanpur) which was condemned by a committee as unfit for coolies of certain classes.

It is doubtful whether the one case (from Sibságar) reported under Section 140 properly comes under that section at all, as the contract does not appear to have been cancelled in consequence of misconduct or ill usage on the part of the employer.

The number of contracts redeemed remains about the same as last year. It is only in a few cases that coolies can raise the sum required for this purpose, and redemptions of long-term agreements are very rare.

There has been a further increase in contracts dissolved "by mutual consent." In most cases this latter arrangement is effected without the cognizance of the Inspector, who only knows of it on seeing the labourers struck off the strength in the half-yearly returns. This is unobjectionable, except, as there is reason to fear is sometimes the case, when recourse is had to this method in order to avoid paying the coolies the sum to which they would be entitled if their contracts were cancelled by the Inspector.

Repatriation of labourers.

10. In Sylhet only two labourers whose contracts were cancelled under Section 122 of the Act by reason of permanent physical unfitness were sent back to their homes out of a total of 34 whose contracts were cancelled on this account. In Cachar only three contracts were thus cancelled, and no labourer was sent to his home. In Lakhimpur 10 labourers were so sent out of 500 cases in which contracts were cancelled. In Sibságar and Nowgong 66 and 37 respectively were sent to their homes out of 71 and 52 labourers whose contracts were cancelled. In Darrang, on the other hand, all the labourers (30) whose contracts were cancelled appear to have been sent to their homes. As has been explained in previous reports, the majority of labourers who are discharged as permanently incapacitated are allowed to live on in the garden lines with their friends, but the district figures under this head suggest differences of system which require explanation. The procedure usually adopted in sending the persons concerned to their homes from the Assam Valley districts is to send them in charge of the Native Doctor on board of the steamers to Dhubri, whence the Deputy-Commissioner arranges for their journey onwards. It is presumed that compensation is regularly awarded under the terms of Section 122 of the Act in all such cases except where the labourer deliberately elects to avail himself of the permission to live on the garden instead. The Chief Commissioner desires that further information may be given under this head in future reports, which should also show, so far as possible, what actually becomes of labourers whose contracts are cancelled under this section of the Act in the event of their not returning to their homes.

The Deputy-Commissioner of Sibságar reports that coolies travelling by land run the risk of being arrested by villagers and ferrymen, who hope for a reward from the manager for restoring, or a bribe from the coolies for releasing, them: that in one case the police were convicted of levying blackmail of this sort from coolies travelling homewards, and that in some cases real deserters and in others supposed deserters were detained by villagers and others on suspicion. In regard to this matter the Chief Commissioner would remark that persons who are not acting on behalf of the employer have no power to arrest a deserter, and that wherever the practices described by the Deputy-Commissioner are found to prevail, district officers should take special steps to put a stop to them.

Settlement of time-expired garden labourers on the land.

11. The figures below show the amount of land held by immigrants in the various districts of the Province:—

District.	1886. Acres.	1887. Acres.
Sylhet	91	128
Cachar	655	1,279
Lakhimpur	2,650	3,071
Sibságar	5,289	6,254
Nowgong	620	853
Darrang	4,389	4,814
Kámrúp	11	15
Total...	13,705	16,414

The figures in each district show an advance more or less marked, though the increase in the total area thus held has not been so great as in 1886. The statistics do not include cultivation on waste land grants or settlements on private lands, and represent only those immigrants who have settled on land held directly from Government. It is probable that some even of these latter settlements are not reported, but the figures every year improve as mauzadárs and other officers learn their duty in regard to reporting them. The Chief Commissioner is having further enquiry made into this matter.

In Cachar, the area of Government land settled with coolies has nearly doubled, and the Deputy-Commissioner reports that they are favoured by mirasdárs as good tenants, and that he was struck by the large clearances made by coolies in the south of Hailákándi.

CHAPTER II.—INSPECTION.

Number of gardens submitting returns.

12. The number of gardens shown in the inspection registers has fallen from 921 in 1886 to 895 in 1887, and the number submitting returns from 774 to 761. The only prosecutions for not submitting the returns due for 1887 were in Sylhet and Darrang, there being one defaulter in each district. In addition to these, one prosecution was instituted in Cachar, but was withdrawn as the defaulter submitted the return on receiving notice. In the district last named the manager who was fined, as reported in paragraph 13 of last year's report, did not appeal against the decision, and has, acting under the advice of the Tea Association, submitted returns for 1887. In the same district only one-fourth of the returns were submitted punctually, and there was much correspondence about discrepancies. It would save much correspondence with district officers and contribute to the earlier preparation of this report, if managers would in all cases submit correct and punctual returns.

Classification of gardens according to the labourers employed, and inspection of Act and non-Act gardens.

13. The following statement shows the number of gardens classified district by district according to the class and number of the labourers employed, the number which submitted returns, and the number visited by inspecting officers:—

	Sylhet.					Cachar.					Lakhimpur.					Sibságar.				
	Employing Act coolies.	Non-Act. Over 50.	Non-Act. Under 50.	No coolies on estate.	Total.	Employing Act coolies.	Non-Act. Over 50.	Non-Act. Under 50.	No coolies on estate.	Total.	Employing Act coolies.	Non-Act. Over 50.	Non-Act. Under 50.	No coolies on estate.	Total.	Employing Act coolies.	Non-Act. Over 50.	Non-Act. Under 50.	No coolies on estate.	Total.
Number of gardens	75	35	3	1	114	154	22	..	6	182	136	6	2	5	149	160	11	6	34	211
Ditto sending returns 50 and 51	74	35	2	..	111	154	22	..	..	176	136	6	..	..	142	160	11	6	..	177
Ditto inspected once	75	34	3	1	113	92	7	..	..	99	127	2	..	..	129	151	10	2		166
Ditto ditto twice	..	..	..	..	..	5	..	..	..	5	..	..	..	..	..	8	..	..	..	8
Ditto ditto thrice	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
Total number inspected	75	34	3	1	113	97	7	..	..	104	128	2	..	..	130	159	10	2	3	174
Number inspected in 1886	80	31	3	1	115	88	7	..	4	99	138	7	1	..	146	159	9	7	4	179

	Nowgong					Darrang					Kámrúp.					Total.				
	Employing Act coolies.	Non-Act. Over 50.	Non-Act. Under 50.	No coolies on estate.	Total.	Employing Act coolies.	Non-Act. Over 50.	Non-Act. Under 50.	No coolies on estate.	Total.	Employing Act coolies.	Non-Act Over 50.	Non-Act Under 50.	No coolies on estate.	Total.	Employing Act coolies.	Non-Act Over 50.	Non-Act Under 50.	No coolies on estate.	Total.
Number of gardens.....	30	19	7	9	65	68	9	3	5	85	10	6	53	20	89	633	108	74	80	895
Ditto sending returns 50 and 51	30	19	7	..	56	68	9	3	..	80	10	6	3	..	19	632	108	21	..	761
Ditto inspected once.....	30	19	..	..	49	63	7	..	..	70	10	6	3	..	19	548	85	8	4	645
Ditto ditto twice	..	..	..	..	..	2	..	..	..	2	.	..	..	..	..	15	..	..	..	15
Ditto ditto thrice.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Total number inspected	30	19	..	..	49	65	7	..	..	72	10	6	3	..	19	564	85	8	4	661
Number inspected in 1886	31	17	1	..	49	67	2	..	..	69	10	5	2	..	17	573	78	14	9	

Inspection of Act and non-Act gardens.

661 out of 761 gardens submitting returns were inspected during the year, the corresponding figures in 1886 being 674 and 774. One hundred gardens thus remained uninspected each year. Of 633 gardens employing Act labourers, 564 were inspected, leaving 69, only one less than last year, uninspected.

The figures for individual districts appear to show that while a fair amount of attention was in most cases given to the work of inspection, there is still room for improvement in some districts, especially in Cachar, where, as in the previous year, this duty was clearly neglected. As regards Cachar, the explanation given is that the district was under-officered, that the Civil Surgeon was detained in the station owing to his having the medical charge of the regiment, and that the two Assistant Superintendents of Police were only available for short periods. While some allowance may be made for these difficulties, the Chief Commissioner cannot admit that they are sufficient to justify the neglect shown, and it is evident that, in view of the comments made by the Chief Commissioner and the Government of India last year, more should have been done. The present Deputy-Commissioner, however, states that most of the neglected gardens have been inspected during the current year, and it is hoped that future reports for this district will show a decidedly better outturn of inspection work. In the province generally, the Chief Commissioner cannot regard it as satisfactory that the number of Act gardens which were inspected more than once during the year should have been 16 only. It is scarcely credible that circumstances, such as the execution of a large number of contracts requiring verification, should not have demanded more frequent inspection in numerous cases, while the rules especially provide for at least two visits being paid to gardens classified as unhealthy during the previous year.

The bulk of the work of inspection falls on sub-divisional officers. Of these the sub-divisional officer of Jorhát, who was deputed also to inspect in Golághát, has the largest outturn, but sub-divisional officers appear everywhere to have done their full share of the work. Civil Surgeons and District Superintendents of Police have in most districts given much assistance. Deputy-Commissioners as a rule do little inspection personally. The Deputy-Commissioner, Nowgong, heads the list with 23 gardens inspected. The Deputy-Commissioner, Sibságar, inspected only two gardens during the year, and the Officiating Deputy-Commissioner, Lakhimpur, inspected only three gardens during eight months. The Chief Commissioner is aware that in some cases exceptional circumstances prevent Deputy-Commissioners from performing any considerable amount of inspection work, but he desires to lay it down as a general rule that Deputy-Commissioners must during each year inspect a certain number of gardens themselves, unless prevented from so doing by very sufficient reasons. This is specially necessary when they are new to the district, and when accordingly they cannot, without gaining local experience, efficiently scrutinise the work of their Assistant Inspectors.

CHAPTER III.—Statistics of the Year's Immigration.

Provincial figures.

14. The following table, based on the half-yearly returns received from employers, compares the importations of all classes for the past two years:—

		1886.	1887.	Increase or decrease.	Percentage of increase or decrease.
Act	Sardári adults	9,092	10,237	+1,145	+12·5
	Contractors' adults	7,263	11,402	+4,139	+56·9
Non-Act ...	Adults	6,360	7,451	+1,091	+17·1
	Children	8,179	7,373	−806	−9·8
	Total	30,894	36,463	+5,569	+18·0

There was thus an increase of 18 per cent. over the figures of last year, and the total number of immigrants, 36,463, was higher than in any of the previous years except 1878 and 1884, when it was 43,061 and 45,511 respectively. The increase under the head both of sardári adults and contractors' adults, especially under the latter, is marked, but in this connection the explanation given in the first paragraph of this report as to the meaning to be attached to the expression "contractors' coolies" should be borne in mind. In the absence of explanation in the district reports, it cannot be said how far the greater immigration which took place during 1887 was due to an increased demand for labourers in the labour districts, or to other causes, such as the existence of scarcity in the district of recruitment. The cause last mentioned is of course beyond the cognizance of officers of this Administration, but the Chief Commissioner would be glad if district officers in Assam would make a point of mentioning in future reports the causes to which any increase or decrease in immigration may have been due, so far as these can be ascertained by means of personal enquiry from the managers of gardens or in any other way.

District and Valley statistics.

15. The following figures give the statistics of Act and non-Act importations for the two valleys and for each district separately, as supplied by the garden managers :—

District.	Act.			Non-Act. Adults.			Non-Act. Children.			Total.		
	1886.	1887.	Percentage, increase or decrease.	1886.	1887.	Percentage, increase or decrease.	1886.	1887.	Percentage, increase or decrease.	1886.	1887.	Percentage, increase or decrease.
Sylhet	1,890	927	−50 95	3,387	3,567	+ 5 31	2,168	1,420	−34·50	7,445	5,914	−20·56
Cachar	2,638	2,134	−19·10	939	1,578	+68 05	1,028	810	−21·20	4,605	4,522	− 1 80
Total of Surma Valley	4,528	3,061	−32 39	4,326	5,145	+18 93	3,196	2,230	−30·22	12,050	10,436	−13·39
Lakhimpur	5,674	7,202	+32 05	480	1,010	+110·42	2,002	2,231	+11·44	7,936	10,443	+31·59
Sibságar	3,406	6,793	+99·44	531	285	− 46 33	1,751	1,563	−10·74	5,688	8,641	+51 92
Nowgong	631	553	−12·36	759	764	+ 66	389	114	−70 69	1,779	1,431	−19·66
Darrang	2,225	3,920	+76 18	243	230	− 5·35	776	1,181	+52·19	3,244	5,331	+64·33
Kámrúp	111	110	− 90	21	17	− 19·05	65	54	−16 92	197	181	− 8·12
Total of Assam Valley	11,827	18,578	+57 08	2,034	2,306	+ 13·37	4,983	5,143	+ 3 21	18,844	26,027	+38 11
Grand Total	16,355	21,639	+32·12	6,360	7,451	+ 17 15	8,179	7,373	− 9 85	30,894	36,463	+18 02

In regard to these statistics it should be explained that the figures showing Act importations, which aggregated 21,639 during the year 1887, include all persons who entered into contracts under Act I. of 1882 either in the recruiting districts or at Dhubri, but do not include persons who entered into such contracts in the other labour districts, while the non-Act importations, which under the head of adults aggregated 7,451, represent all persons who executed contracts on the garden during the year under Act I. of 1882, or who are either free labourers properly so called or are working on contracts under Act XIII. of 1859. It would be interesting to know the precise distribution of newly recruited labour under the two categories last mentioned, but unfortunately the information available under this head is incomplete. The statistics given in the above statement in regard to Act importations during 1887 into the Assam Valley districts do not correspond with those given in paragraph 1 of this report,

the total here given (18,578) being larger by nearly a thousand than that shown in the Dhubri return (17,741, exclusive of dependants); again, the figures above given under the head of non-Act adults seem far too small if, as should apparently be the case, they include new contracts entered into during the year on the garden under Act I. of 1882 (which are shown in paragraph 21 of the report as numbering 6,138), and also free labourers and those working on contracts under Act XIII. of 1859. These discrepancies cannot be explained, and it can only be said that the figures given are those supplied by garden managers.

There was a decrease in immigration into the Surma Valley, which was marked in the case of Sylhet, and slight in that of Cachar, but in the case of both districts there was an increase (inconsiderable in the case of Sylhet and considerable in that of Cachar) under the head of non-Act adults. In Sylhet the general falling off is, as already stated, attributed to the fact that the newly reclaimed tracts are now fully supplied with labour. Only half as many coolies as in 1886 were imported into Sylhet under the Act. In Cachar the decline is explained to be due to the cheapness and abundance of free labour

Of the districts of the Assam Valley three (Lakhimpur, Sibságar, and Darrang) show an increase in total importations and also in Act importations, while a small decrease took place under both heads in Nowgong and Kámrúp. Under the head of non-Act adults, the only districts in which an increase took place were Lakhimpur and Nowgong. In the latter district it was inconsiderable, but in the former district the number of labourers thus imported increased upwards of two-fold. On the other hand the number of non-Act adults imported into Sibságar shows a very considerable falling off. The Chief Commissioner is unable to offer any adequate explanation of these results, except in so far as they were due to ordinary fluctuations.

16. The comparative table below shows the adult immigrants according to their sex and country of origin, divided also into classes as Act coolies (sardári or contractors') and non-Act coolies:—

N. Nationality of immigrants.

		Act				Non-Act.		Total.	
		Garden sardars		Contractors					
		1886.	1887.	1886.	1887	1886	1887	1886.	1887.
1		2	3	4	5	6	7	8	9
Bengal	Men	652	656	790	984	423	371	1,865	2,011
	Women	627	562	696	968	461	360	1,784	1,890
	Total	1,279	1,218	1,486	1,952	884	731	3,649	3,901
North-Western Provinces, Oudh, and Behar	Men	1,076	901	767	1,329	1,893	2,440	3,736	4,670
	Women	686	550	448	797	1,064	1,479	2,198	2,826
	Total	1,762	1,451	1,215	2,126	2,957	3,919	5,934	7,496
Chota Nagpur	Men	3,275	4,018	2,495	4,160	949	960	6,719	9,138
	Women	2,697	3,470	1,965	3,062	779	715	5,441	7,247
	Total	5,972	7,488	4,460	7,222	1,728	1,675	12,160	16,385
Nepal	Men	.....	.....	61	80	11	14	72	94
	Women	.....	.....	23	18	2	4	25	22
	Total	.....	.....	84	98	13	18	97	116
Madras	Men	27	51	3	1	88	49	118	101
	Women	9	29	2	.....	60	30	71	59
	Total	36	80	5	1	148	79	189	160
Bombay	Men	.....	.....	1	.....	.....	1	1	1
	Women	.....	.....	.....	.....	.....	.....	.....	.....
	Total	.....	.....	1	.....	.....	1	1	1
Assam	Men	43	.....	4	3	551	1,004	598	1,007
	Women	.....	.....	8	.....	79	24	87	24
	Total	43	.....	12	3	630	1,028	685	1,031
Total	Men	5,073	5,626	4,121	6,557	3,915	4,839	13,109	17,022
	Women	4,019	4,611	3,142	4,845	2,445	2,612	9 606	12,068
Grand Total		9,092	10,237	7,263	11,402	6,360	7,451	22,715	29,090

The above figures, which relate only to adult immigrants, do not call for any detailed remarks. It will be seen that the increase in importations was distributed over persons of all nationalities except those from Madras and Bombay, and that coolies from Chota Nágpúr constituted more than half the immigrants who came into the Province during the year.

Female immigrants.

17. The proportion of women among the immigrants is shown below:—

Locality of recruitment.	Percentage of women to men among			
	Sardári immigrants.	Contractors' immigrants.	Non-Act immigrants.	All adult immigrants.
Bengal	46·1	49·5	49·2	48·4
North-Western Provinces, Oudh, and Behar.	37·7	37·4	37·7	37·6
Chota Nagpur	46·3	42·3	42·6	44·2
Total	45·0	42·7	40·3	43·0

The figures vary little from those of last year. The proportion of women is naturally greatest among immigrants from Bengal, which forms the nearest recruiting ground for Assam.

Contractors' and sardári labourers.

18. The following table gives the number of Act (distinguishing sardári and contractors') coolies imported into each district during the past two years, with the number of sardárs' certificates granted and the average number of coolies imported by each sardár:—

District.	Sardári coolies.		Number of certificates granted to garden sardárs.	Average recruits per sardár.	Contractors' coolies.		Percentage of increase or decrease of importations.	
	1886.	1887.	1887.	1887.	1886.	1887.	Sardári.	Contractors'.
Sylhet	1,514	662	604	1·0	376	265	−56·2	−29·5
Cachar	1,621	1,022	570	1·7	1,017	1,112	−36·9	+9·3
Total of Surma Valley	3,135	1,684	1,174	1·4	1,393	1,377	−46·2	−1·1
Lakhimpur	2,389	3,469	542	6·4	3,065	3,733	+45·2	+21·7
Sibságar	2,199	2,798	874	3·2	1,207	3,995	+27·2	+230·9
Nowgong	164	178	155	1·1	467	375	+8·5	−19·7
Darrang	1,094	2,010	413	4·8	1,131	1,910	+83·7	+68·8
Kámrúp	111	98	43	2 2	...	12	−11·7	+100·0
Total of Assam Valley	5,957	8,553	2,027	4·2	5,870	10,025	+43·5	+70·7
Grand Total	9,092	10,237	3,201	3·2	7,263	11,402	+12·5	+56·9

Although fewer coolies are shown in this statement as having been imported into the Surma Valley by sardárs, the number of certificates granted to sardárs increased both in the Sylhet and Cachar districts, in the case of the former district from 341 to 604, and in that of the latter from 545 to 570. The explanation of this apparent contradiction is, as has been noticed in previous reports, that many sardárs brought up unregistered recruits, who are entered amongst the non-Act immigrants until, if this eventually happens, they enter into contracts under Act I. of 1882. Probably also, in accordance with the practice noticed in paragraph 5 of the report for 1884, certificated sardárs brought up many coolies who, though duly registered under Section 66 of the Act, were as a matter of fact not put on contract under the Act as required by Section 69. Moreover, the Deputy-Commissioner of Sylhet reports that, of the 604 certificates granted, no less than 173 were cancelled at the request of garden managers who preferred their sardárs to come up with free immigrants. The bringing up of unregistered recruits by certificated sardárs involves a contravention of Section 151 of the Act, and Deputy-Commissioners should use every endeavour to enforce the law in this respect. Unfortunately

the law as at present framed fails to provide any effective means of meeting cases in which a breach of the provisions of Section 69 is not discovered until the certificated sardár reaches the labour district.

Those of the above figures which relate to the number of labourers imported into the several districts by garden sardárs and to those who fall under the head of "contractors' coolies" show some curious variations, no sufficient explanation of which is, however, forthcoming.

CHAPTER IV.—Labour Contracts.

Number of contracts made.

19. The number of contracts executed without the intervention of the Inspector under Section 111 of the Act has risen from 15,394 to 19,457, the increase being common to all districts except Kámrúp, where the figures are very small. The number of contracts executed before the Inspector or Magistrate under Section 112 has slightly increased, but is still quite unimportant. In addition to the above, 21,323 contracts were executed at Dhubri under Section 111, against 12,606 in the previous year, and 6,845 contracts were entered into in the districts of recruitment, against 9,333 in 1886. Thus, the total number of contracts executed during the year (1) by immigrants in the districts of recruitment or at Dhubri, and (2) by immigrants or labourers locally procured in the labour districts more properly so-called was 48,612, against 38,092 during the preceding year.

Nationality of labourers making local contracts.

20. The following table shows the nationality of labourers who entered into local contracts, district by district:—

District	Sex.	Contracted under Section 111.	Contracted under Section 112.	Particulars of columns 3 and 4 by nationality.							
				Bengal.	N.-W. Prov., Oudh, and Behar.	Chota Nagpur.	Nepal.	Madras.	Bombay.	Assam.	Total of columns 3 and 4.
1	2	3	4	5	6	7	8	9	10	11	12
Sylhet	Men	1,566	3	355	574	598	3	34	...	5	1,569
	Women	1,074	...	338	316	382	...	38	...	...	1,074
	Total of 1887	2,640	3	693	890	980	3	72	...	5	2,643
	" " 1886	2,515	41	647	855	939	1	114	...	...	2,556
Cachar	Men	1,593	104	545	796	326	2	19	1	8	1,697
	Women	1,036	92	464	435	218	...	11	...	...	1,128
	Total of 1887	2,629	196	1,009	1,231	544	2	30	1	8	2,825
	" " 1886	2,129	80	838	910	426	1	3	6	25	2,209
Lakhimpur	Men	1,029	159	146	28	914	...	1	...	69	1,188
	Women	505	112	103	7	503	...	1	...	3	617
	Total of 1887	1,534	271	219	35	1,447	...	2	...	72	1,805
	" " 1886	865	522	118	22	1,199	...	17	...	31	1,387
Sibságar	Men	5,693	93	990	956	2,890	11	18	4	917	5,786
	Women	4,075	24	904	715	2,222	2	5	...	251	4,099
	Total of 1887	9,768	117	1,894	1,671	5,112	13	23	4	1,168	9,885
	" " 1886	7,589	30	1,383	960	4,228	1	18	5	1,027	7,619
Nowgong	Men	84	7	6	10	75	...	...	...	...	91
	Women	39	1	8	1	31	...	...	...	...	40
	Total of 1887	123	8	14	11	106	...	...		...	131
	" " 1886	4	1	2	1	1	...	...	...	1	5
Darrang	Men	1,755	253	414	235	644	19	...	...	696	2,008
	Women	986	126	317	123	479	4	2	...	187	1,112
	Total of 1887	2,741	379	731	358	1,123	23	2	...	883	3,120
	" " 1886	2,239	66	594	166	748	6	25	...	766	2,305
Kámrúp	Men	19	9	...	...	19	...	...	...	9	28
	Women	3	4	2	...	3	.	...	...	2	7
	Total of 1887	22	13	2	...	22	...	...	...	11	35
	" " 1886	53	19	6	1	62	...	...	...	3	72
	Grand total, 1887	19,457	987	4,592	4,196	9,354	41	129	5	2,147	20,444
	" " 1886	15,394	759	3,588	2,915	7,603	9	174	11	1,853	16,153

Sibságar and Darrang are the only districts in which the indigenous population enter into agreements to any great extent. In Darrang many Cacharis are employed under the Act, and in Sibságar the Assamese coolies employed are also, almost without exception, Cacharies from Darrang and Kámrúp.

Details of local contracts

21. The following table gives some details as to these local contracts, of the classes who entered into them, their term, and how many were verified and how many cancelled: –

District	Section 111	Section 112	Class of labourers				Number of years						Verified	Cancelled	Percentage of verified and cancelled to total contracts under Section 111.
			New	Time-expired.	Old Act coolies transferred.	Local	Under one year	1	2	3	4	5			
Sylhet	2 640	3	1 980	664	.	..		765	168	1 710	.		1,796	17	68 6
Cachar	2 629	196	1 920	898		7	1	691	389	1 665	.	79	2 022	1	76 9
Lakhimpur	1,534	271		1 805			..	948	187	408	23	239	651		42 4
Sibságar	9 768	117	2,075	6 647		1 163	.	4 621	2 541	2,603	70	50	5 916		60 5
Nowgong	128	8	85	50		48	..	128	4	.	..	4	118	1	96 7
Darrang	2 741	379	116	2 088	..	916	60	1,940	635	469	6	210	2,002	.	73 0
Kámrúp	22	13	3	21	..	11		15	10	6	.	4	5	1	27·2
Total	19,407	987	6 138	12,163	..	2,148	61	9,103	3,934	6 061	99	586	1 509	*20	64 4

* These figures, which are compiled from the reports of Inspectors of Labourers, differ from those shown in column 4 of the statement in paragraph 9, which are compiled from statistics furnished by the managers of gardens The above figures should be accepted as the more correct

In Sylhet, an increase in local contracts occurred in South Sylhet and Habíganj, while there was a decrease in the North Sylhet and Karimganj sub-divisions. In Cachar 1,920 newly imported coolies entered into contracts under Act I, against 804 in the previous year, this result being due to the comparatively large amount of free labour imported during the year under report. It may be noticed that, while Sylhet had no contracts the duration of which was more than three years, in Cachar the number of five-year contracts increased from 30 in the previous year to 79. In Lakhimpur no new arrivals contracted under the Act. Sibságar had a much larger number of local contracts (9,885) than any other district, but most of these (6,647) were given by old hands, and were for periods of one to three years, very few being over that term.

It is worthy of remark that in the case of contracts entered into in the recruiting districts for the Assam Valley 56 3 per cent. were for three years and 43 7 per cent. for five years; in the case of contracts entered into at Dhubri, 3·5 per cent. only were for three years, and no less than 96 5 per cent. were for five years; while in the labour districts properly so-called contracts for three years represented 92 5 per cent and those for five years 2·8 per cent. only of the total number. The very large percentage of the Dhubri contracts which are entered into for 5 years calls for explanation.

The small number of contracts, 20 (against 133 in the previous year), cancelled by the Inspectors is noteworthy, but until the law is steadily enforced, and until it can be said with certainty that no contracts are kept back from the Inspectors, it would be premature to treat this result as a subject for congratulation. In Sylhet 17 contracts were cancelled by mutual consent, and one was so cancelled in Nowgong, the labourer having absconded. In the other two cases the reason for cancelment is not stated.

22. The extent to which the rules regarding the verification of contracts under Section 111 of the Act are neglected has been frequently commented upon by the Chief Commissioner. Unfortunately, the form of statement given in the preceding paragraph of this report has not been so devised as to enable any definite conclusion to be formed regarding the extent to which those rules were observed during the year under report. The statement in question compares the number of contracts executed under Section 111 during the year with the number verified during the same period. But in the first place, it is only a portion of the contracts executed during any given year that would in the ordinary course fall to be verified within that year. In fact, if it were assumed that each garden was inspected once a year, and that a certain degree of uniformity prevails throughout the year, only half the contracts executed within a year would fall to be verified within that year. On the other hand, a large number of contracts executed before the commencement of a year would fall to be verified within that year. Making the same assumptions, half the contracts executed in a year would fall to be verified within the year following. This being so, the statement in question

would convey an accurate idea of the extent to which the law has been observed, only if the number of contracts executed in the year under Section 111 were constant, which is very far from being the case. Instructions will be issued for the preparation in future of a statement which will remedy this defect; but in the meantime, though no accurate notion can be formed as to the precise degree to which the law is observed, it is perfectly manifest that it is still neglected to a most reprehensible extent. The neglect which seems to be displayed in this matter, especially in Lakhimpur, where the proper performance of the duty of verification is of great importance, cannot be allowed to continue. The Chief Commissioner must insist on Deputy-Commissioners taking the matter systematically in hand, and he looks to the employers of labour to co-operate with them in regard thereto. It must be borne in mind that this Section 111, which is so great a convenience to the planting community, is still on its trial, and that the only chance of justifying its continued existence lies in a strict observance of the rules relating to verification. These rules were explained with some minuteness in a Circular issued during the year (No. 5, dated the 3rd February 1887) which dwelt upon the special importance of mustering all coolies whose contracts are to be verified, and which described in detail the procedure to be adopted by inspecting officers. The Chief Commissioner can scarcely believe that, if the matter is properly explained to them, employers will offer objections to full compliance with the above instructions, but if this should prove to be the case, the fact should at once be reported, in order that it may be considered whether a substantial penalty should not be prescribed under Section 145 of the Act for failure to observe the directions of the law in this respect.

CHAPTER V.—Labour Force.

Statistics of the labour force

25. The following table is an abstract of the statement at the end of the report, which deals with the full details of the Provincial labour force, and shows roughly the additions and deductions which have been made in that force during the year 1887:—

Labour force remaining at the end of the year 1886 (column 2 of statement).		304,158*
Additions—		
Imported by contractors or garden-sardárs, including free labourers and dependents imported direct (columns 3, 4, and 5 of statement)	36,463	
Local labour contracts entered into under Sections 111 and 112 of Act I. of 1882 (columns 6 and 7 of statement).	20,441	
Received from other gardens (column 8 of statement) ...	6,017	
Deserters re-captured (column 9 of statement) ...	288	
Remaining after expiry of contract (column 10 of statement)	20,976	
Otherwise obtained (column 11 of statement) ...	23,036	
Births (column 12 of statement)	9,043	
Total	.....	116,267
Deductions—		
Transferred to other gardens (column 16 of statement) ...	3,918	
Left with permission or on expiry of contract (columns 17 and 25 of statement).	60,038	
Deaths (column 18 of statement)	11,633	
Desertions („ 19 of „)	11,086	
Free labourers put under contract (columns 21 and 22 of statement).	8,845	
Contracts cancelled under Sections 111, 140, or 177 of Act I. of 1882 (column 23 of statement).	6	
„ „ „ Section 122 „ 24 „	690	
„ redeemed under Section 142 „ 26 „	40	
„ cancelled „ 129 „ 27 „	14	
„ dissolved by mutual consent „ 28 „	236	
Total		96,506
Total increase during the year...	...	19,761
Grand Total at the close of the year ...	...	323,919

* Revised figures

It should be explained that the above figures are taken from half-yearly statistics supplied by garden managers, and that it is not possible to clear up the doubtful points which even a cursory examination of them discloses. As an instance of this, the fact may be mentioned that details cannot be given of the large entry under the head "Otherwise obtained." In the case of the Sibságar district the Deputy-Commissioner explains that the entry under the head last mentioned relates to indigenous labour, and to persons who came from Lower Assam, Bengal, Chota Nágpúr, and the North-Western Provinces in search of labour, and who are presumably not imported by contractors, and do not pass through the hands of sardárs. The other district reports do not contain any adequate explanation of the figures in question, but the Chief Commissioner is inclined to think that the large entries may possibly be due to a not unnatural tendency on the part of those who prepare the returns to include under a miscellaneous heading any labourers who are obtained on the spot, whether such labourers represent indigenous labour properly so-called, or persons who have left their gardens without authority, or who belong to other districts in Assam, or possibly in some cases to places outside the Province, and who do not clearly fall under any other of the prescribed headings of the statement. There are other doubtful points which might be mentioned, but Mr. Fitzpatrick does not think that it would serve any useful purpose to pursue the enquiry on the present occasion. He will, however, consider separately whether, without giving additional trouble to employers, anything can be done to make the returns clearer and less open to doubtful interpretation than they at present appear to be.

Mean strength of the labour force

24. The statement below shows the total labour force at the beginning and end of each of the last three years, and also the mean strength for the two half years of 1887:—

Class of labourers.	1st January 1885.	1st January 1886.	1st January 1887.	1st July 1887.	Mean strength for the first half year of 1887.	31st December 1887.	Mean strength for the second half year of 1887.
Act adults	83,751	82,183	77,476	82,071	79,773	81,723	81,897
Non-Act { Adults	97,750	102,563	114,022	126,128	120,075	122,474	124,301
Non-Act { Children	95,364	104,337	112,660	118,580	115,620	119,722	119,151
Total	276,865	289,083	304,158	326,779	315,468	323,919	325,349

District figures of the labour force.

25. The details of each district are given in the table below :—

District.	1st January 1887.	31st December 1887.	Percentage of total provincial force.	Increase or decrease.	Percentage of increase or decrease.
Sylhet.....	55,582	60,660	18·7	+5,078	+9·1
Cachar	86,360	88,522	24.7	+2,162	+2·5
Total Surma Valley	141,942	149,182	46·1	+7,240	+5·1
Lakhimpur.	50,225	54,283	16·7	+4,058	+8·0
Sibságar.....	68,3[illegible]	73,545	22·7	+5,178	+7·5
Nowgong	12[illegible]	12,355	3·8	−113	−0·09
Darrang	28,[illegible]	31,794	9 9	+3,432	+12·1
Kámrúp.....	2,79[illegible]	2,760	0·8	−34	−1·2
Total Assam Valley	162,216	174,737	53·9	+12,521	+7·7
Grand Total.	304,158	323,919	100·0	+19,761	+6·4

Nationality of the adult labour force

26. The following statement shows the nationality and the sex of the adult labour force at the beginning and end of 1887:—

Nationality	Sex.	Act. 1886.	Act. 1887.	Non-Act. 1886	Non-Act. 1887.	Total. 1886.	Total. 1887.	Ratio of nationality.
Bengal	Men	9,214	9,292	16,533	17,301	25,747	26,593	25·4
	Women	9,057	8,607	15,569	16,535	24,626	25,142	
North-Western Provinces, Oudh, and Behar.	Men	8,123	7,964	14,352	15,718	22,475	23,682	21·0
	Women	5,280	5,444	12,095	13,725	17,375	19,169	
Chota Nagpur	Men	23,858	26,044	23,921	25,891	47,779	51,935	47·0
	Women	18,870	21,109	21,236	22,952	40,106	44,061	
Nepal	Men	85	40	112	108	197	148	0·1
	Women	38	8	76	91	114	99	
Madras	Men	180	194	552	595	732	789	0·7
	Women	117	154	497	523	614	677	
Bombay	Men	31	7	82	106	113	113	0·1
	Women	17	4	83	121	100	125	
Assam	Men	1,968	2,110	7,302	7,251	9,270	9,361	5·7
	Women	638	746	1,612	1,557	2,250	2,303	
Total	Men	43,459	45,651	62,854	66,970	106,313	112,621	.....
	Women	34,017	36,072	51,168	55,504	85,185	91,576	.....
Grand Total	.....	*77,476	81,723	114,022*	122,474	191,498*	204,197	.....

* Revised figures, *vide* explanations at foot of the statement at the end of the report.

The proportion of Act, non-Act, and all coolies belonging to each nationality, is shown separately thus:—

	1886.	1887.		
	Total.	Act labourers.	Non-Act.	Total.
Bengal	26·4	21·9	27·6	25·4
North-Western Provinces, Oudh, and Behar.	20·7	16·4	24·1	21·0
Chota Nagpur	45·8	57·7	39·9	47·0
Nepal	0·2	0·06	0·1	0·1
Madras	0·7	0·43	0·9	0·7
Bombay	0·1	0·01	0·2	0·1
Assam	6·1	3·5	7·2	5·7
Total	100	100	100	100

27. The mean strength in each district for each half-year and for the whole year is shown below. On these figures the half-yearly and annual percentages of mortality and desertions are calculated :—

Mean strength in each district.

District.	Act. First half year.	Act. Second half year.	Act. Annual mean.	Non-Act. Adults. First half year.	Non-Act. Adults. Second half year.	Non-Act. Adults. Annual mean	Non-Act. Children. First half year.	Non-Act. Children. Second half year.	Non-Act. Children. Annual mean.	Total annual strength. First half year.	Total annual strength. Second half year.	Total annual strength. Annual mean.
Sylhet	9,449	9,115	9,282	27,778	29,754	28,766	20,176	21,074	20,625	57,404	59,943	58,673
Cachar	11,560	10,424	10,992	36,904	38,563	37,733	38,666	39,223	38,944	87,130	88,211	87,670
Lakhimpur	18,066	19,264	18,665	17,424	17,545	17,484	17,483	18,194	17,838	52,974	55,003	53,988
Sibságar	27,617	28,945	28,281	17,864	18,314	18,089	26,007	26,818	26,412	71,487	74,078	72,782
Nowgong	1,963	1,845	1,904	6,958	6,921	6,939	4,110	4,208	4,159	13,031	12,975	13,003
Darrang	10,599	11,836	11,217	11,741	11,723	11,732	8,205	8,702	8,453	30,546	32,262	31,404
Kámrúp	517	466	491	1,404	1,479	1,441	971	930	950	2,893	2,876	2,884
Total	79,773	81,897	80,835	120,075	124,301	122,188	115,620	119,151	117,385	315,468	325,349	320,408

CHAPTER VI.—Desertions.

Provincial and district figures

28 The following table shows the number of adult deserters, district by district, for the past two years :—

District.	Total desertions among adults.		Act		Non-Act.		Percentage of desertions on annual strength among					
							Act.		Non-Act		Total adult population.	
	1886.	1887.	1886	1887	1886.	1887.	1886	1887	1886	1887	1886	1887.
Sylhet	2 863	2 909	1,103	901	1,760	2,008	10 24	9 68	6 86	7 01	8 07	7 66
Cachar	2,394	2 447	795	905	1,599	1,542	5 53	8 23	4 93	4 09	5 09	5 01
Lakhimpur	1,055	1,161	656	876	399	285	3 74	4 68	2 30	1 62	3 01	3 21
Sibságar	1,313	1,481	788	871	525	610	2 87	3 08	3 12	3 36	2 96	3 19
Nowgong	403	370	74	84	329	286	3 25	4 40	5 05	4 11	4 59	4 18
Darrang	752	723	327	489	425	234	3 41	4 40	4 05	1 98	3 74	3 16
Kámrup	111	66	33	12	78	54	6 89	2 51	5 30	3 69	5 75	3 86
Total	8,891	9,157	3,776	4,138	5,115	5,019	4 62	5·11	4 66	4 11	4 62	4 50

The increase in desertions of Act labourers is common to all districts except Sylhet and Kámrúp, and a reason which has been put forward for this result is that it naturally follows on the large importations of the year, coupled with the fact that newly arrived coolies are most given to desert. This explanation may possibly affect the matter to a certain extent, but the Chief Commissioner, on the information at present before him, is not prepared to accept it as sufficient without further enquiry, and in any case it would fail to account for the considerable differences between the percentages of desertions of Act coolies on annual strength in the several districts which reappear in each successive report. Mr. Fitzpatrick hopes that he may be able further to elucidate these matters in the report for 1888. As has been pointed out in previous reports, the figures even under the head of Act coolies cannot be accepted as including all deserters, many of whom, when recaptured by the garden agency, are merely sent back to the garden and neither returned as deserters nor taken to the nearest police-station, as they should be under Section 172 of the Act. On the other hand, in the case of non-Act coolies many are classed as deserters who are not deserters at all, such, for instance, as those who, not being under any agreement enforceable by law, leave the garden of their own accord in order to better themselves at another garden. So far as the above figures relate to desertions amongst non-Act coolies, the Chief Commissioner is inclined to doubt whether they possess any real value at all, while, as regards Act coolies, it is possible that a further source of error exists which would render the returns misleading. The matter last mentioned is under the separate consideration of the Chief Commissioner.

Arrests and convictions

29. The following table shows the number of deserters in each district, with the number of warrants issued and the number of convictions obtained:—

District.	Number deserted (Act labourers).	Number of warrants issued.	Number arrested.				Number convicted.
			By warrants	By manager.	By police.	Total.	
Sylhet	901	64	37	23	.....	60	53
Cachar	905	121	34	136	6	176	170
Lakhimpur	876	94	42	41	31	114	102
Sibságar	871	111	45	179	20	244	208
Nowgong	84	9	3	30	.....	33	29
Darrang	489	118	37	71	.....	108	100
Kámrúp	12	.....	.....	... ..	.....	.....	... ..
Total for 1887.....	4,138	517	198	480	57	735	662
„ „ 1886	3,776	438	143	324	66	533	467

These figures do not call for any particular remark, except that the proportion of Act deserters arrested (17·7) and convicted (15·9) in 1887 was larger than in the previous year, when the percentages under these heads were 14·1 and 12·3 respectively. In connection with these figures it is necessary to bear in mind the fact which has been noticed in previous reports, that a runaway is more easily recaptured in the sparsely-peopled tracts of the Brahmaputra Valley than in a comparatively crowded district like Sylhet.

Nationality and sex of deserters.

30. The nationality and sex of deserters is shown below:—

Nationality.	Sex.	Number of deserters.				Total.		Percentage of desertions on annual strength among					
		Act.		Non-Act.				Act		Non-Act.		Total.	
		1886.	1887.	1886.	1887	1886.	1887.	1886.	1887.	1886	1887.	1886	1887.
Bengal	Men ...	590	497	718	643	1,308	1,140	5·93	5 36	4 42	3·75	4·05	3·66
	Women	254	223	492	524	746	747	2 60	2·54	3·24	3·19		
North-Western Provinces, Oudh, and Behar.	Men ...	943	1,103	1,042	1,276	1,985	2,379	10 74	13 51	7·54	8·39	6·91	7·98
	Women	196	216	584	747	780	963	3·45	3 98	5·00	5 70		
Chota Nagpur ...	Men ...	1,219	1,423	758	707	1,977	2,130	4·90	5 56	3·28	2 76	3 32	3·21
	Women	370	453	557	456	927	909	1·91	2·21	2·73	2 00		
Nepal	Men ...	28	11	17	17	45	28	28 60	23 70	14·78	14·26	14·57	13·29
	Women	2	3	3	5	5	8	5·85	33 33	3·22	6 09		
Madras	Men ...	8	30	76	44	84	74	4 63	16 82	14 15	7 57	8 79	7·58
	Women	1	5	31	28	32	33	0·88	3·99	6·27	5·32		
Bombay	Men ...	4	...	9	2	13	2	4·51	..	12 03	1 92	8·32	3·11
	Women	2	...	8	5	10	5	2 75	...	10 53	4·93		
Assam	Men ...	148	163	705	530	853	693	7 05	7·66	9 69	6·11	8·46	5·68
	Women	11	11	115	35	126	46	1 77	1 50	7·40	·2·17		
Total ...	Men ...	2,940	3,227	3,325	3,219	6,265	6,446	6·38	7 12	5·44	4 77	5·83	5·72
	Women	836	911	1,790	1,800	2,626	2,711	2·35	2·56	3 62	3·29	3·09	3·00
Grand Total...	.....	3,776	4,138	5,115	5,019	8,891	9,157	4·62	5 11	4 63	4·11	4·62	4·50

As in previous years, amongst the classes which constitute the large majority of the labourers, the coolies from the North-Western Provinces, Oudh, and Behar continued to be the most frequent deserters, while the lowest percentage of desertions occurred amongst the labourers from Chota Nágpúr.

CHAPTER VII.—Mortality in Transit and on Gardens.

Mortality at Dhubri and during transit on the Brahmaputra.

31. The health of the immigrants during the year both at Dhubri and while in transit on the Brahmaputra between that place and the labour districts was good. At Dhubri the number of deaths aggregated 18, as compared with 33 during the previous year, of which 11 were due to cholera and 7 to other causes, while the deaths during transit up the Brahmaputra numbered 24, or ·9 per mille, against 14, or ·7 per mille, in the previous year. In the case of 16 deaths which occurred on board the steamers the cause of death was cholera.

The above figures do not include any mortality which occurred after final debarkation and while in the debarkation depôts above Dhubri. In 1887 there were 45 deaths in the debarkation depôts, of which 8 occurred in Darrang, 31 in Sibságar, and 6 in Lakhimpur. In the previous year the number of such deaths was 38, of which 7 occurred in Darrang, 2 in Nowgong, 19 in Sibságar, and 10 in Lakhimpur.

Mortality during transit to the Surma Valley districts

32. The information available in regard to the mortality which actually occurred amongst immigrants during transit to the Surma Valley districts is very defective for the reasons given in paragraph 2 of this report, and also because way-bills are not prescribed in the case of free immigrants, that is, of immigrants who are not recruited by contractors or garden-sardárs under the Act. In the case of immigrants who passed through the depôts the following figures are given:—

District.	Number of immigrants who left Goalundo.	Deaths.			
		En route.	In hospital.	Total	Proportion per mille.
Sylhet	2,694	Not stated.		43	15·9
Cachar	2,840	83	29	112	39·4

The year was a healthy one, and there was a considerable decrease in the rates of mortality *en route*, from 33·6 to 15·9 per mille in the case of Sylhet, and from 61·5 to 39·4 per mille in the case of Cachar. The great majority of the deaths (40 amongst the coolies destined for Sylhet gardens and 74 amongst those *en route* to gardens in Cachar) were due to cholera, and the Deputy-Commissioner of Cachar gives figures which show that the mortality was heaviest between Goalundo and Karimganj, and not, as was noted by the Embarkation Agent at Goalundo with regard to the deaths of 1886, in the upper reaches of the river. The depôt which has been recently established at Fenchuganj will provide medical help and supervision at an important point on the journey.

Death-rate for the year.

33. The statistics of mortality in each district for each half-year separately are given in the table below, where they are compared with the corresponding figures of 1886:—

District.	Deaths among all classes of labourers, including children.						Ratio of deaths per mille.					
							Half-yearly.				Annual.	
	First half year.		Second half year.		Total.		First half year.		Second half year.			
	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887	1886.	1887.	1886.	1887.
Sylhet	1,109	774	1,295	1 110	2,404	1,884	20·9	13 4	23·2	18 5	44·1	31·9
Cachar	1,149	1,331	1,512	1,332	2,661	2,663	13·8	15·2	17·7	15·1	31 5	30 3
Lakhimpur	1,090	1,204	1,202	1,299	2,292	2,503	21·4	22·7	23 4	23 6	44 8	46·3
Sibságar	1,107	1,187	1,742	1,595	2,849	2,782	16·1	16·6	25 0	21·5	41·1	38 1
Nowgong	275	181	285	235	560	416	21·8	13 8	22·3	18 1	44 1	31·9
Darrang	500	640	677	654	1,177	1,294	18 1	20 9	23·7	20·2	41·8	41·1
Kámrúp	73	52	43	39	116	91	25 2	17·9	14·8	13·5	40·0	31·4
Total	5,303	5,369	6,756	6,264	12,059	11,633	17 7	17·0	22·1	19·2	39·8	36·2

There has thus been a decrease of more than 3 per cent. in the rate of mortality, deaths having fallen from 39·8 in 1886 to 36·2 per mille in 1887. This rate is lower than that of any years in the past decade except 1880 and 1881. The improvement is common to all districts except Lakhimpur, where the rate advanced from 44·8 to 46·3 per mille, and is specially marked and gratifying in Sylhet and Nowgong. In these districts, which in some parts have always been unhealthy, the ratio has fallen by more than 12 per mille, and this year very nearly approaches that of Cachar, always the most healthy district in the Province. The decrease in the death-rate is to be attributed to the general healthiness of the year. Cholera accounts for the higher mortality in Lakhimpur.

Death-rate among adults.

34. The following table shows the mortality among both Act and non-Act adults in the years 1886 and 1887:—

District.	Number of deaths among adults.						Ratio per mille of deaths to annual strength.						Annual strength of total adult population of both Act and non-Act labourers.	
	Act.		Non-Act.		Total.		Act.		Non-Act.		Total.			
	1886.	1887.	1886.	1887.	1886.	1887.	1886.	1887.	1886	1887.	188	1887.	1886.	1887.
Sylhet	682	408	920	820	1,602	1,228	69 4	44·1	35·8	28·2	45·2	32 0	35,414	38,048
Cachar	634	544	832	1,043	1,466	1,587	44·5	49·7	25 4	27 5	31·2	32 5	46,931	48,726
Lakhimpur	1,310	1,353	397	472	1,707	1,825	74 9	72 4	22 9	26·9	49 1	50·4	34,704	36,149
Sibságar	1,349	1,461	539	477	1,888	1,938	49 3	51·3	32 1	26·3	42 7	41·7	44,120	46,370
Nowgong	150	96	259	193	409	289	66 5	50·5	39·7	27·7	46 6	32 6	8,775	8,843
Darrang	651	758	278	233	929	991	67 7	67 5	26·2	19·8	46 0	43·1	20,190	22,949
Kámrúp	18	14	46	29	64	43	28 7	28 9	35 0	20·0	33 0	22 2	1,938	1,933
Total	4,794	4,634	3,271	3,267	8,065	7,901	58·9	57·2	29 5	25·8	41·9	38·9	192,075	203,022

The improvement was chiefly in the health of the non-Act adults. Cachar and Sibságar are, however, the only districts in which the ratio of mortality amongst Act adults appreciably increased. In Cachar, the increase in the death ratio which is observable among adults of both classes is ascribed to deaths among new arrivals. In Sibságar the larger importation of contractors' coolies is said to have swelled the mortality among Act adults.

As usual, the mortality amongst Act labourers was largely in excess of that amongst non-Act labourers It should, however, be remembered in connection with this point that the statistics of non-Act labourers are not so carefully compiled or scrutinised as those of labourers under Act I. At the same time it is beyond a doubt that the mortality among Act coolies is always, as a matter of fact, largely in excess of that among non-Act coolies, and that this is due to the former being to a very much greater extent freshly imported from distant places. The table in paragraph 38 shows how largely the rate of mortality is dependent on the nationality of the labourers. The rate for Assamese coolies there given (12·7 per mille) is no doubt much too low, probably owing to the circumstance that many Assamese who appear on the rolls of a garden are persons who are only working temporarily, and who, if they got out of health, would return to their homes, but there can be no doubt whatever that native Assamese are far healthier than imported labourers, and the figures, so far back as they are readily available for reference, that is to say, from 1883 downwards, uniformly show that the Bengali is much more healthy than the native of Chota Nágpúr and the latter than the native of the North-Western Provinces, Oudh, and Behar. In fact it would seem that the greater the change involved in coming to Assam, the more the labourer suffers in health. It will be observed, however, that the rate of mortality for even the most unhealthy of these classes, the North-Western Provinces, Oudh, and Behar labourers, with equal uniformity falls short of the death-rate for Act adults, and this is probably due to the circumstance that the class of Act adults includes not only more than its rateable proportion of imported labourers but also more than its rateable proportion of the new arrivals among them, that is, of those persons who have not been acclimatized. It is, however, somewhat remarkable that (*see* tables in paragraph 35) the comparative largeness of the death-rate among Act coolies is more striking in the case of cholera, which is generally supposed to be less discriminating in its attacks than in the case of jungle fever, which might naturally be expected to be specially fatal to new arrivals. The same result is observable in previous reports, and the point is one to which the attention of the Civil Surgeons and of the Sanitary Commissioner should be directed.

Causes of death among Act and non Act coolies

35. The two tables below show the recorded causes of the deaths that occurred among the adult labourers of both classes (Act and non-Act) :—

Act Labourers.

District.	Mean strength of Act labourers employed in 1887.		Deaths from					Total of columns 4 to 8			Annual ratio of deaths per mille
	First half year.	Second half year.	Cholera.	Dysentery.	Jungle fever	Dropsy.	Other causes.	First half year.	Second half year.	Total	
1	2	3	4	5	6	7	8	9	10	11	12
Sylhet	9,449	9,115	49	109	39	48	163	153	255	408	44 1
Cachar	11,560	10,424	165	68	130	37	144	257	287	544	49 7
Lakhimpur...	18,066	19,264	317	286	96	.....	654	658	695	1,353	72 4
Sibsagar.....	27,617	28,945	339	299	120	28	675	590	871	1,461	51·3
Nowgong ...	1,963	1,845	7	20	5	.....	64	42	54	96	50·5
Darrang	10,599	11,836	134	186	26	128	284	364	394	758	67·5
Kámrúp	517	466	2	1	.....	3	8	5	9	14	28·9
Total of 1887	79,773	81,897	1,013	969	416	244	1,992	2,069	2,565	4,634	57·2
„ 1886	82,734	80,381	882	1,082	397	54	2,379	2,077	2,717	4,794	58·9
„ 1885	85,187	84,400	572	1,083	456	.....	2,258	1,598	2,771	4,369	51 5

Non-Act Labourers.

District.	Mean strength of non-Act labourers employed in 1887.		Deaths from					Total of columns 4 to 8.			Annual ratio of deaths per mille.
	First half year.	Second half year.	Cholera.	Dysentery.	Jungle fever.	Dropsy.	Other causes.	First half year.	Second half year.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12
Sylhet	27,778	29,754	117	144	177	57	325	312	508	820	28·2
Cachar	36,904	38,563	236	209	173	58	367	538	505	1,043	27·5
Lakhimpur	17,424	17,545	115	71	35	57	194	249	223	472	26·9
Sibsagar	17,864	18,314	94	85	61	23	214	243	234	477	26 3
Nowgong	6,958	6,921	14	18	30	...	131	95	98	193	27·7
Darrang	11,741	11,723	29	40	20	25	119	104	129	233	19·8
Kámrúp	1,404	1,479	6	2	8	5	8	17	12	29	20·2
Total of 1887...	120,075	124,301	611	569	504	225	1,358	1,558	1,709	3,267	25·8
„ 1886...	107,951	113,086	639	559	480	251	1,342	1,523	1,748	3,271	29·5

Although deaths from cholera were somewhat more numerous than in the previous year (1,624, against 1,521), the annual ratio of deaths per mille from this cause was the same (7·9) in both years. Similarly, jungle fever accounted for more deaths than in the previous year (920, against 877), but the annual ratio of deaths due to this cause was identical during the two years (4·5 per mille). There is, however, often doubt as to the correctness of classification when made by native doctors. The causes of deaths are discussed in detail in the next chapter in the Civil Surgeons' reports on unhealthy gardens. In regard to the cholera deaths, the Chief Commissioner would remark that it is intelligible that when cholera once appears in a neighbourhood, it should, in spite of sanitary precautions, cause a greater mortality in the lines of a tea-garden, where the people are so closely congregated together, than in an ordinary agricultural village, but it is surprising to find that in a year so, comparatively speaking, free from cholera as 1887 was in Assam, there should have been a considerable increase in the deaths from cholera among both Act and non-Act coolies in the districts of Cachar and Lakhimpur, and among Act coolies in the district of Sibságar. Outside the tea-gardens the mortality from cholera was unusually small in Sibságar and Lakhimpur, and in Cachar it was very moderate. This, too, is a matter which requires to be considered in more detail by the sanitary authorities. Under this head attention may also be drawn to the remarks made by Dr. Eteson, late Deputy-Surgeon-General, in paragraph 126 of the extracts from the Sanitary Report for 1887 appended to this report, regarding the identity of what is commonly known as anæmia amongst coolies in Assam with *beri beri*, and the causes which tend to produce that disease.

Death-rate among children.

36. The statement below shows the death-rate among children in the last two years:—

District.	Mean strength of children in 1887.		Deaths from					Total of columns 4 to 8.			Total of 1886.	Annual ratio of deaths per mille.	
	First half year.	Second half year.	Cholera.	Dysentery.	Jungle fever.	Dropsy.	Other causes.	First half-year.	Second half-year	Total.		1887.	1886.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Sylhet	20,176	21,074	63	110	181	22	280	309	347	656	802	31 7	42·2
Cachar	38,666	39,223	92	141	203	41	599	536	540	1,076	1,185	27·5	32·7
Lakhimpur	17,483	18,194	41	175	114	48	300	297	381	678	585	37·8	35 5
Sibságar	26,007	26,818	75	192	185	40	352	354	490	844	961	31·8	38·5
Nowgong	4,110	4,208	4	13	43	....	67	44	83	127	151	30·4	38·5
Darrang	8,205	8,702	57	71	56	14	105	172	131	303	248	35·9	31·7
Kámrup	971	930	...	2	17	.....	29	30	18	48	52	50 1	54·9
Total of 1887...	115,620	119,151	332	704	799	165	1,732	1,742	1,990	3,732	.....	31·7	...
Total of 1886 ...	107,445	111,100	8	744	907	126	1,859	1,703	2,291	3,994	3,994	...	36·4

Lakhimpur and Darrang are the only districts which do not share in the general improvement.

Order of demerit as regards death-rate.

37. The following is the order of demerit of the various districts, both with regard to the three different classes in the labour force and to the total mortality:—

	Order of mortality among			
	Act adults.	Non-Act adults.	Children.	Total.
Sylhet	6	1	5	4
Cachar	5	3	7	6
Lakhimpur	1	4	2	1
Sibságar	3	5	4	3
Nowgong	4	2	6	4
Darrang	2	7	3	2
Kámrúp	7	6	1	5

Cachar is again the most healthy, and Lakhimpur the most unhealthy, district in the Province. Sylhet, except as regards non-Act adults, has much improved.

Nationality according to the country of origin

38. The statement below shows the mortality distributed according to nationality, and gives figures for adults only:—

		Deaths amongst adults of both classes.		Ratio per mille of deaths to annual strength.		Annual strength of adults of both Act and non-Act labourers.	
		1886.	1887.	1886.	1887.	1886.	1887.
Bengal	Men ...	921	792	36·1	30 8	51,072	51,500
	Women..	928	799				
North-Western Provinces, Oudh, and Behar.	Men ...	1,153	1,118	49·2	46 4	39,912	41,937
	Women..	818	838				
Chota Nagpur... ...	Men ...	2,110	2,320	45·2	43·7	87,560	94,575
	Women..	1,853	1,830				
Nepal	Men ...	8	5	31·8	18·9	343	268
	Women..	3	.....				
Madras	Men ...	41	20	50 4	28·0	1,345	1,424
	Women..	27	20				
Bombay	Men ...	4	1	31·0	4·5	283	225
	Women..	3	.....				
Assam	Men ...	136	106	16·9	12·7	11,560	13,115
	Women..	60	52				
Total	Men ...	4,373	4,362	40·7	38·6	107,161	112,792
	Women..	3,692	3,539	43·3	39 2	84,915	90,231
Grand Total	.....	8,065	7,901	41·8	38 9	192,076	203,023

CHAPTER VIII.—Unhealthy Gardens.

Proportion of unhealthy gardens in each district

39. The following statement shows the proportion of unhealthy gardens in each district. All gardens that have 10 or more deaths on them during the year, and the death-rate on which exceeds 7 per cent., are classed as unhealthy gardens:—

District.	Number of gardens.	Number of unhealthy gardens.	Percentage of unhealthy gardens.
Sylhet.....	114	5	4·3
Cachar	182	7	3·8
Lakhimpur	149	15	10·0
Sibságar	211	10	4·7
Nowgong	65	2	3·0
Darrang	85	10	11·7
Kámrúp	89	...	...
Total of 1887	895	49	5·4
" 1886	921	64	6·9

The proportion of unhealthy gardens has fallen from 6·9 to 5·4 per cent and the number from 64 to 49. The improvement is marked in every district except Lakhimpur, which has one, and Darrang, which has two, more unhealthy gardens than last year.

Unhealthy gardens in Sylhet

40. There were only five unhealthy gardens in Sylhet in 1887, a great improvement compared with the years 1885 and 1886, when there were 18 and 13 such gardens respectively In three of these gardens the mortality was over 100 per mille. The following statement shows the unhealthy gardens in each sub-division:—

Sub-division.	Name of gardens.	Mean strength		Deaths.			Ratio per mille.			Deaths among Act labourers.	
		First half year	Second half year.	First half year.	Second half year	Total.	First half year.	Second half year.	Annual.	Number.	Ratio per mille.
North Sylhet...	Jaintia	214	195	2	19	21	9·3	97 4	106 7	5	146·0
South Sylhet	Dhalai	413	456	25	18	43	60 5	39 4	99 9	19	98 4
	Amrail Cherra	276	395	11	13	24	39 8	32 9	72 7	14	68·2
	The Reeks	128	92	2	8	10	15 6	86 9	102 5	...	...
Karimganj.....	Lálkhira	150	162	...	19	19	...	117·2	117 2	...	...
	Total of unhealthy gardens	1,181	1,300	40	77	117	33 8	59 2	93·0	...	...
	" of district	57,404	59,943	774	1,110	1,884	13 4	18 5	31 9	...	...
	Balance, *i e*, healthy gardens.	56,223	58,643	734	1,033	1,767	13 0	17 6	30 6	...	...

The causes of death are shown below:—

Sub-division.	Name of garden.	Cholera.	Dysentery.	Fever.	Dropsy.	Anæmia.	Other causes.	Total.
North Sylhet	Jaintia...	12	2	4	...	...	3	21
South Sylhet	Dhalai	1	11	18	2	...	16	43
	Amrail Cherra	2	9	1	2	...	10	24
	The Reeks	1	1	3	1	...	4	10
Karimganj	Lálkhirá	14	1	2	...	...	2	19
	Total	30	24	23	5	...	35	117

Amrail Cherra has figured in the lists for several years; the Jaintia and Dhalai gardens were also in the list in 1885. On the Jaintia and Lálkhirá gardens the mortality was due to outbreaks of cholera. The Reeks was a new garden, and has since been temporarily closed. The rate of mortality on Dhalai and Amrail Cherra has much diminished; on Amrail Cherra it was 289·5 in 1886, and nearly as high in 1885, while in 1887 it was only 72·7 per mille.

How far deaths from cholera should weigh towards the condemnation of a garden is a question which has been considered on several recent occasions. On the one hand cholera is so very fitful in its visitations that it would be unreasonable to condemn a garden as unhealthy merely because there had been a heavy mortality from cholera in a single year. On the other hand, it is beyond doubt that mortality from cholera is very much enhanced by insanitary surroundings, and if a garden suffers from it to a striking extent in several years, there is good ground for concluding that there is something wrong. This being the position, the Chief Commissioner could not accept a suggestion which was made to him that cholera deaths should be excluded from the unhealthy garden returns. He thinks the better course is to continue to show such deaths, subject to the warning that when the excessive mortality is due chiefly to cholera, it is not necessarily to be inferred that the garden is unhealthy. It need hardly be added that a serious mortality from cholera, even in a single year, though it may not afford ground for action under the sections of the Act relating to unhealthy gardens, should always be taken to indicate the necessity for a most careful inspection with a view to ascertaining the existence of insanitary conditions.

Unhealthy gardens in Cachar

41. There were 7 unhealthy gardens in Cachar, against 10 in 1886:—

Sub-division.	Name of garden.	Mean strength.		Deaths.			Ratio per mille.			Deaths among Act labourers.	
		First half year.	Second half year.	First half year.	Second half year.	Total.	First half year.	Second half year.	Annual.	Number.	Ratio per mille.
Sadr	Helera	339	336	22	10	32	64·8	29·7	94·5	2	42·5
	Dhubidhar ...	526	532	21	22	43	39 9	41·3	81·2	13	114·3
	Chandwa	146	156	8	9	17	54·7	57·6	112·3	8	120·7
	Dulargram ...	601	637	15	30	45	24·9	47·0	71·9	11	118·2
	Mulidhar	244	229	5	12	17	20·5	52·4	72·9	1	111·1
	Nágádum	175	213	6	17	23	34·2	79·8	114 0	15	124·3
Hailákándi ..	Lalacherra ...	635	654	59	12	71	92·9	18·3	111·2	26	131·3
	Total of unhealthy gardens.	2,666	2,757	136	112	248	51·0	40 6	91·6	...	...
	Total of district.	87,130	88,211	1,331	1,332	2,663	15 2	15·1	30·3	...	...
	Balance, *i.e.*, healthy gardens.	84,464	85,454	1,195	1,220	2,415	14 1	14·2	28·3	...	..

The following table shows the causes of deaths on these gardens:—

Sub-division.	Name of garden.	Cholera.	Dysentery.	Fever.	Dropsy.	Anæmia.	Other causes.	Total.
Sadr.....	Helera.....	19	1	4	1	...	7	32
	Dhubidhar	9	21	6	5	...	2	43
	Chandwa.....	9	2	1	1	...	4	17
	Dulargram	21	5	2	2	...	15	45
	Mulidhar.....	1	3	8	1	...	4	17
	Nágádum	...	12	2	2	...	7	23
Hailákándi.....	Lalacherra	47	5	...	4	...	15	71
	Total..... ...	106	49	23	16	...	54	248

It will be observed that all these gardens except Nágádum have been brought into the list by cholera. Three of them, Chandwa, Nágádum, and Lalacherra, were on the list in 1886, but unfortunately the reports regarding them for that year are not in sufficient detail to admit of the cause being ascertained. They will have to be closely watched in future. Lalacherra was inspected by the Sub-divisional Officer, and again by the Deputy-Commissioner, who took samples of the water from two hill streams then used. On these samples the source of water-supply was condemned by the Civil Surgeon. The manager then dug wells and entertained water-carriers and an extra native doctor, in order to reduce the mortality. The Civil Surgeon has since visited the garden and submitted the following very brief report:—

"The water-supply is ample, of good quality, and I could find nothing in regard to sanitation that would cause the heavy mortality from cholera during last year, 1887. But cholera had been raging in the neighbouring *bastis* before and during the months of April and May. As there is constant and frequent communication between the garden and these *bastis*, it is not difficult to decide how and from what cause the epidemic arose."

The Deputy-Commissioner has been directed to invite the manager's attention to the prohibition of use of the hill streams for drinking, the necessity of care in recruiting new coolies, and the desirability of removing the lines from the cholera-infected sites.

The Civil Surgeon has inspected the Helera, Chandwa, Dulargram, Nágádum, and Dhubidhar gardens since the close of the year. His report on the Nágádum garden was as follows :—

"*Nágádum.—Act-I. coolies, first half.*—Four deaths only amongst these coolies. There were less than 100. All these deaths occurred in newly-arrived coolies, three of them North-Western Provinces' coolies and unhealthy, weakly men. One, a Sonthali, but who had been ill on the passage up, and arrived so on the garden and did not rally.

"*Free labourers.*—Only two children, both North-Western Provinces, one six months and the other a year, bowel complaints. The mortality for the first half has not been high.

"*Act-I. coolies, second half.*—Eleven deaths. This is heavy, and the deaths amongst these coolies commenced in September and up to November, none having occurred in July and August. It is the beginning of the cold weather, or rather the change in the monsoon, that proves most generally detrimental to health. Six of the deaths occurred from bowel disease, only one fever, two dropsy, one chronic bronchitis, and one debility. Most of these coolies were of the importation of 1886 that I drew attention to in my last year's report on this garden. They had then all the appearance of unhealthy coolies, but for the first six months had rallied somewhat, but the close of the rains and the setting in of the cold weather had proved too much for their previous debilitated systems. Most, if not all, the diarrhœa and dysentery was of a malarial character

"*Free labourers.*—Here again no deaths amongst adults, all children, and mostly dysentery. The difficulty in treating children and getting them to take medicines is always very great, but more so on a tea-garden, where you get very little help from the parents, and the food supplied and given by the latter to the former is often anything but the correct article.

"Water has been provided for drinking by good wells which I inspected; but those in the lines situated near the stream still use that water to save trouble, in spite of all that can be done.

"The garden is gradually extending, and should be a healthy one, although previous to my visit there has been a fearful epidemic of cholera this year (1888) brought in by newly arrived coolies. I hear upwards of 80 or 90 have died on the voyage up and later on in the garden itself."

On this report the Chief Commissioner directed the assembling of a Committee to report on the garden under Section 129 of the Act. The Committee which met in August last cancelled the contracts of six labourers as permanently incapacitated, and transferred three others to another garden. They recommended that no more North-Western Provinces coolies should be recruited for two years, that the jungle round the lines should be cleared and the space cultivated, that drains should be cut, that the use of the Nágádum stream for drinking should be prohibited, and that quarantine lines should be maintained for new coolies. These proceedings have been approved by the Chief Commissioner.

On the other gardens the causes of mortality are for the most part those usually dwelt on in such reports,—the prevalence of cholera, the carelessness in regard to children, the difficulty of keeping the coolies to the supply of wholesome water provided for them, and, most fatal of all, the practice of importing any coolies who come to hand without any medical examination and without any regard to their fitness to stand the change.

Unhealthy gardens in Lakhimpur.

42. The following list shows 15 unhealthy gardens in Lakhimpur, against 14 last year :—

Name of garden.	Mean strength.		Deaths.			Ratio per mille			Deaths among Act labourers.	
	First half year.	Second half year	First half year.	Second half year	Total.	First half year.	Second half year	Annual	Number.	Ratio per mille.
Chota Tingrai	139	174	9	5	14	64 7	28 8	93 5	10	99 2
Barbarua	683	698	34	20	54	49 7	28 6	78 3	16	188 9
Hukanguri	1,297	1,412	102	26	128	78 6	18 4	97 0	92	223 8
Dinjan	929	931	70	14	84	75 3	15 0	90 3	48	95 6
Samdang	346	349	13	14	27	37 5	40 1	77·6	7	80 6
Kehang	429	445	12	19	31	27 9	42 6	70 5	13	80 9
Assam Railways and Trading Company	1,694	1,923	47	85	132	27·7	44 2	71 9	80	75 9
Dikhari	220	229	10	8	18	45·4	34 9	80 3	11	86 3
Jaipur Bahmara	555	666	24	25	49	43 2	37 5	80 7	40	117 4
Nahor Kotia	328	333	29	9	38	88 4	27 0	115 4	29	176 3
Hapjanparbat	102	109	4	6	10	39 2	55 0	94 2	10	155 0
Hulmari	572	565	23	32	55	40 2	56 6	96 8	26	102 0
Joyhing	911	945	57	71	108	3.6	75·1	115·7	55	101 8
Kadam	220	233	7	9	16	31 8	38 6	70 4	7	67 9
Sillombari	313	326	15	14	29	47	42 9	90 8	22	105 9
Total of unhealthy gardens	8,738	9,338	436	357	793	49 8	38 2	88 0	...	...
Total of district	52,974	55,003	1,204	1,299	2,503	22 7	23 6	46 3	...	...
Balance, *i e*, healthy gardens	44,236	45,665	768	942	1,710	17 3	20 6	37 9	...	...

The following table shows the causes of the deaths :—

Name of garden.	Cholera.	Dysentery.	Fever.	Dropsy.	Anæmia.	Other causes.	Total.
Chota Tingrai	5	2	...	4	1	2	14
Barbarua	25	5	4	...	19	1	54
Hukanguri	103	6	9	...	4	6	128
Dinjan	40	16	6	4	3	15	84
Samdang	...	1	1	3	15	7	27
Kehang	2	8	5	2	...	14	31
Assam Railways and Trading Company	...	81	3	5	3	40	132
Dikhari	5	7	1	1	3	1	18
Jaipur Balimara	5	9	5	1	20	9	49
Nahor Kotia	25	2	3	...	1	7	38
Hapjanparbat	...	1	...	4	2	3	10
Hulmari	4	15	4	16	3	13	55
Joyhing	5	34	4	4	29	32	108
Kadam	2	4	7	2	...	1	16
Sillonibari	7	7	...	9	1	5	29
Total	228	198	52	55	104	156	793

It will be observed that in 9 out of these 15 gardens it was cholera that raised the mortality to above 7 per cent. Two of these gardens, Hulmari and Kadam, are in North Lakhimpur, and were not inspected by the Civil Surgeon. This is specially unfortunate in the case of Hulmari, where the death-rate, even excluding cholera, was lamentably high. On the rest the Civil Surgeon reports as follows :—

"The high mortality gardens of 1887 I have divided, for convenience of report, into two classes, (1) those where the high death-rate was due chiefly to cholera, and (2) where the causes of death were more general.

"In the first are Barbarua, Dinjan, Nahor Kotia, and Hukanguri.

"In the second Jaipur (Balimara), Joyhing, Samdang, Kehang, Kadam, Sillonibari, Hulmari, Hapjanparbat, Dikhari, Chota Tingrai, and the coolies of the Assam Railways and Trading Company.

"*Barbarua.*— Of 54 deaths during the year, 25 were from cholera, 7 men, 10 women, and 8 children. The first case was that of a man, who arrived on the garden on the 23rd April and fell ill two days after. This marked the commencement of the outbreak, which lasted till the 26th May.

"Of the remaining 29 deaths, no less than 18 are ascribed to anæmia. This disease is very common among the tea-garden coolies of Upper Assam, and I have found by *post-mortem* and microscopic examination that it is identical with what is known as *beri beri* in Ceylon and in other parts of the world. The symptoms, particularly that of anæmia, are due to the presence, in the small intestine, of numerous small worms, each about ½ an inch long and 1-20th of an inch thick. They feed on the blood of their host, which they suck in by puncturing the soft inner lining of the gut. In well marked cases, there are thousands of these parasites. Associated with anæmia, as a result of the presence of these worms, are dropsy, debility, and an irritability of the bowels, hitherto ascribed to dysentery by tea-garden Doctor Babus. The disease is not limited to foreign coolies; Assamese and Cacharis working on tea-gardens are often affected by it. The tea-garden returns of last year in the Dibrugarh division show that there were 192 deaths from anæmia, 247 from dropsy, 61 from debility, and 357 from dysentery. Assuming that 25 per cent. of the two latter died from real dysentery and from debility, due to other causes than *beri beri*, we are left with a total of 752 deaths occurring from a disease hitherto misunderstood and wrongly treated.

"The coolie-lines are built around an old Assamese tank, in which the water does not remain at one permanent level. The coolies are forbidden the use of the tank water for drinking purposes, and have had sunk for their benefit several very superior wells fitted with pumps. In spite of this prohibition, however, I have no doubt its water is drunk and that its consumption is hurtful. I saw nothing else on the garden to point to local causes of unhealthiness, other than climatic.

"*Dinjan.*—Cholera in an epidemic form appeared among the coolies of the garden on the 14th April. On this date a man who had arrived from his country only two days before, fell ill and died. The next day two more of the same batch were fatally stricken, and on the 16th the first old coolie was attacked. In all 10 men, 15 women, and 15 children died from cholera.

"About 20 per cent. of the seizures recovered, only, however, in the majority of instances, to die of some wasting disease later on. The last death from cholera was on the 26th May. Of the other 44 deaths, 16 were from dysentery, 7 from anæmia and dropsy, 6 from fever, and 15 from other causes. 30 out of the whole total of 84 deaths were children. The coolies are looked after very well on this garden. Its coolie-lines are well built, the sites of the houses are well raised, and the water-supply well conserved and sufficient. Arrangements for the future have been made to keep all new coolies at a small out-garden, some miles away, till all risk of infection is over.

"*Nahor Kotia.*—There were 25 deaths from cholera on this garden between the 25th May and 6th July; one other death in November is ascribed to the same cause. Of these 25, 11 were men, 9 women, and 5 children. I could not trace any connection between the first appearance of cholera and the arrival of new coolies. The first case had been on the garden exactly a month before he was attacked; the remainder were all old coolies. In the case of 8 of the remaining 13 deaths, the causes of death are not given of two, and incorrectly reported of 6. Old age, jaundice, &c., have been hazarded as diseases from which coolies under the Act expired.

"This garden is situated on the Dehing, after that river leaves the Nága Hills, and has been, till the other day, entirely dependent on the river for its water-supply. There is now a well on the garden fitted with a pump. Another should be sunk at the opposite end of the lines. The drainage of the lines, though very much improved to what it was, is capable of further improvement. The sites of the houses are low, and should be raised.

"*Hukanguri.*—The first case of cholera on this garden, last year, was a new coolie, who fell ill the day he arrived on the garden, the 8th April. He was taken to the garden hospital, where after two days, several of the in-patients contracted the disease and died. The first death occurred on the 10th April; from this date to the 18th July, the end of the epidemic, there were 158 seizures and 94 deaths. In August, September, and December, there were solitary re-appearances of cholera, swelling the total number of deaths from this one cause alone to 103. Of this number, 77 were Act-I. coolies 20 non-Act adults and 6 children, only 4 of the adults had been longer than two years in Assam.

" Nine of the deaths, other than from cholera, were from fever, 6 from dysentery, 4 from anæmia, and 6 from divers causes.

" There is nothing to report on the condition of the garden, in respect to its management of the coolies, except that everything is as it should be. The lines are good, the water-supply sufficient, and the medical treatment of the sick confided to the care of Dr. Brookes, who resides two miles away. I have nothing to suggest.

" Of the other gardens, three, that is, Sillonibari, Chota Tingrai, and Dikhari, have had their death list swelled by cholera in conjunction with other causes. All three are small estates.

Sillonibari.—Sillonibari is a garden in North Lakhimpur, on which there were 29 deaths during the year, 22 adults, all Act-I. coolies, and 7 children. The causes of these deaths, cholera 7, dropsy 9, dysentery 7, anæmia and debility 2, and other causes 4. Cholera was prevalent in May, June, August, and September. All the adults who died had been recruited from Chota Nagpur, and were good coolies.

" The general surroundings of the coolie did not appear to me to be very satisfactory when I inspected this garden early this year.

" Half of the lines had been built on a low-lying piece of ground, and the sites of the houses were hardly, if at all, raised. The houses were in bad repair, and very few of them had gardens attached. The only source of water-supply was a well, which, according to the manager's own admission, did not yield good water.

" It would appear that the construction of new lines in the form of barracks on another site is in contemplation. Pending this change, however, the existing condition of affairs appears to me to have been too much neglected.

Dikhari.—The percentage of mortality on this garden for the past four years has been as follows:—

1884	8·00
1885	3·53
1886	8·08
1887	8·03

" The amount of tea under cultivation is 180 acres, and the total labour force is, including working children, 163 souls. The yield of tea was at the rate of about 550lbs per acre for last year. The garden is, therefore, I consider, short-handed. If a garden makes over three hundred pounds of tea per acre, it requires a labour force of one adult coolie per acre to make it with. Any less proportion than this signifies that the coolies are liable at times to be overworked. I do not wish to infer that tasks are anywhere excessive, but with a small labour force and a " rush of leaf," coolies, who would be perhaps the better for a rest, are unavoidably put to " ticca " work, to prevent a waste of growing leaf. Nor do I think it is the fault of garden managers that any factory is under-manned; it is due either to inattention or parsimony on the part of the agent or owner, or to the fact that agent, owner, and manager, have all been duped by unscrupulous contractors.

"Insufficient labour has been, as I have stated, one of the causes of the sickness on this garden; bad water and neglect of first sanitary principles are two others. The sites of the houses are low and the drainage of the lines has been neglected. There is only one well in the lines, and in this, through its bad construction, the water is foul. The coolies either dig for their own water or fetch it from a semi-stagnant stream flowing past the lines. It is only fair to the present manager to state that he has only taken over charge a short time ago, and that he appreciates his responsibilities better than his predecessor. An application has been made for 40 new coolies; their supply should be made imperative.

" The present well should be cleaned out and repaired, and a second sunk for the benefit of the coolies living at some distance from it. The drainage of the lines should be also looked into, when there is more labour.

" *Chota Tingrai.*—Chota Tingrai is a small garden of the Upper Assam Tea Company on the Tingrai river There were 11 deaths in all among its coolies last year, 5 from cholera in April and May, one from leprosy, one at the age of 65, and the remainder from anæmia, dropsy, and dysentery.

" The garden is buried in forest and remote, which may explain a little of its past sickness; but as will be seen from an examination of its figures, its mortality was unfortunate and to a great extent unavoidable I saw nothing to condemn when I inspected the garden.

" *Kehang.*—Kehang adjoins the above, and, like it, is closed in on all sides with forests.

"A committee, directed to report on the mortality on this garden for 1883, recommended, with the approval of the Commissioner, that all future additions to its labour force be made by sardári recruited coolies only.

"The Superintendent of the Company, however, informed me that, through an arrangement with a contractor, by which a certain number of coolies was guaranteed for each sardár placed under his care, a large number of depôt coolies found their way to the garden, having been drafted in to bring up the total to the guaranteed number. Of 81 new coolies recruited in this way last year, it was found necessary to cancel the agreements of 14 before 4 months of their term were over. The causes of the 31 deaths on the garden were general :—

Cholera	2
Dysentery	2
Dropsy	2
Fever	5
Diarrhœa	2
Chest complaints	2
Other diseases	5
Old age	5

"To the last named is ascribed the death of 3 Act and 2 non-Act coolies. When I inspected the garden the coolie-houses were in good repair, and well built. The water-supply is good, conserved, but the drainage was at fault, and there was an excess of jungle in and around the lines. Up to the 8th April, there were 8 deaths, which shows the death-rate to be still high.

"*Jaipur Estates (Balimara)*—Large additions to the cultivated area of these gardens have been made during last year, and the signs of recent clearances are everywhere prominent. This has had the usual effect on the health of the coolies, a large number of whom were prostrated and their health shattered by repeated attacks of fever. More important than this, however, as a cause of general ill-health, was the presence of a large number of new coolies of a type utterly unsuited to the climate and the nature of the work. As at Kehang, sardári-recruited coolies were only contracted for, and a similar arrangement made for their supply; but unfortunately with a similarly negative result Indifferent and bad coolies were added to make up the guaranteed number, and it was among these that the sickness and mortality was most noticeable. Of 40 Act I. coolies that died between January and December, 35 had been less than two years on the garden, and more than half hailed from unsuitable districts like Hazaribagh and Midnapur. Fever, anæmia, and dysentery were the more immediate causes of death. The coolie-lines are in several divisions, the largest of which is on rather a low site, from which it is intended to remove them next year. The drainage of this division is, from its situation, at fault. There is a most excellent system of water-supply for the coolies.

"*Hapjan Parbat.*—On the 23rd November 1886 Mr. Godfrey inspected this garden, and reported as follows :—

"'The manager of this garden, Mr Beadon, died in August 1885; a Receiver was then appointed by the civil court to manage the estate, recently the mortgagee had entered on possession, and is now the proprietor and manager.

"'He has secured a bad lot of new coolies; they were imported for the Dumduma Tea Company by the Planters' Stores and Agency Co, but the Dumduma Company refused to take them, so the Planters' Stores and Agency Co made them over for a consideration to the proprietor of this garden They executed fresh contracts under Section 111 of the Emigration Act. Of 31 coolies so obtained, five have died, three have deserted, several are in a very debilitated condition, two agreements I cancelled The coolies are certainly of a very bad class, with some few exceptions. The proprietor is looking after his unfortunate bargains, they are well fed and clothed, and receive all necessary comforts.'

"I have very little to add to the above. There were 10 deaths last year, all from anæmia, dropsy, and debility. Every one of these coolies belonged to the batch referred to by Mr. Godfrey. There has not been a death this year.

"*Samdang.*—A committee was held on this garden on the 11th December 1885 Its recommendations related chiefly to an improvement of the water supply. In 1886 the health of the garden improved considerably, but suffered again in 1887, when its death rate reached over 11 per cent. The chief cause of this mortality was *beri beri*, or, as it is usually returned, anæmia, dropsy, and debility. From this cause died 21 out of the 27 coolies. Of the 7 deaths among Act coolies, six had been on the garden less than two years.

"The manager was away on leave when I inspected the garden, which may account for the generally neglected condition I found things in. The sites of the houses are low, the houses themselves in bad repair, and there is hardly a drain of any use. Collections of filth and refuse, apparently of months' standing, are noticeable all over the place. The stock of medicines is very small, and the native medical assistant is in possession of a forged certificate.

"*Joyhing.*—The particulars of the mortality on this garden are as follow :—

"Of 535 coolies under Act I., 19 died in the first half of the year, and 36 in the second; 36 of these were male and 19 female, and 21 had been on the garden less than a year. Of 392 coolies not working the Act and children, 19 died in the first half of the year and 35 in the second, 4 were adults and 50 children. The causes of these 108 deaths are given as under :—

Anæmia and dropsy	33	Cholera	5
Diarrhœa and dysentery	41	Fever	4
Pneumonia and bronchitis	12	Other diseases	13

"As can be seen from the foregoing, nearly twice as many died in second half of the year as in the first, and also nearly half the deaths were those of children. The second half of the year, being the hottest, the dampest, and the time of the hardest work, is always the most trying to the coolie. Deaths among the children of a tea-garden, too, must, as I explained in a former report, be higher than elsewhere; but such a large proportion of child and infant mortality suggests the reflection whether the coolies were allowed sufficient time to look after their young. All the adults who died were good coolies recruited from Chota Nagpur.

"The coolie-lines are built on the banks of a river, which is the sole source of the water-supply of the garden. I consider this a mistake, as, though the stream runs clear in the cold weather, the water during the rains is very discoloured, and shows signs of vegetable and animal contamination. There

should be several wells sunk for the benefit of the coolies; and if the mortality still continues, the whole of the lines should be moved sufficiently far away from the river to make the carriage of its water a toil.

"The site of the lines is somewhat low, but the drainage is carried out very fairly well The houses are in very good order, some of the newer ones, situated at the entrance to the garden, are among the finest I have ever seen.

"*Assam Railways.*—The coolies of this company are employed at one or other of their three collieries,—Tikak, Ledo, and Ledo Valley. A few work at Margherita. At Tikak the coolies live on the side of a hill about 800 feet high, immediately adjoining their work. At Ledo and Ledo Valley the mines are at some distance from the lines. At the latter place the galleries enter the faces of opposite hills, between which, at their bases, runs a small stream, which lower down flows past the coolie houses. Dysentery was as in 1886, the chief cause of mortality among the coolies. Of a total of 134 deaths, 81 (40 men, 21 women, and 17 children) died from this cause. This dysentery, I satisfied myself, is properly so called, and is not associated with *beri beri*, which it is curious to note, is rare here. The two unhealthy divisions were Tikak and Ledo Valley, and the propagation of dysentery was effected in a different way at each place. From want of space, the banks of the stream alluded to, as flowing near the mines of Ledo Valley, were freely resorted to as a latrine ground, while at the same time its water, both here and near the lines, was drunk by most of the coolies. It is easy to imagine how, under these circumstances, one case of dysentery could spread the disease. At Tikak, through the steepness of the hill-sides, the naturally indolent and filthy habits of the coolie, the whole of the neighbourhood of the lines was converted into an open latrine. The coolies thus lived in an offensive and noxious atmosphere. This has all been changed for the better. Latrines have been made for the convenience of the coolies at both Tikak and Ledo Valley. Filtered water is stored in large tanks placed at the entrance of the pits, and the use of the river water is rigorously forbidden. In every other respect the coolie has been very carefully looked after."

The Commissioner of the Assam Valley Districts, after considering the propriety of calling Committees on the Dikhari, Kehang, Balimara, Hapjan Parbat, and Samdang gardens, recommended that, as the season was advanced and the managers were reported to be taking the necessary sanitary measures, the statistics for the current year 1888 should be awaited. This recommendation was accepted by the Chief Commissioner. The Commissioner was also informed that the Joyhing garden appeared from the Civil Surgeon's report to be fit subject for a Committee. The Deputy-Commissioner has since made a very careful inspection of this garden. He is of opinion that the sickness and mortality were caused chiefly by the coolies drinking the water of the Dhekiajuli, a sluggish stream. As the Deputy-Commissioner reports that the lines will be soon removed to a healthier site near the Joyhing river, a clear hill stream; that the manager is taking every care of his coolies, and that a European doctor will shortly take charge of the garden, no further action in the way of calling a Committee seems necessary.

Unhealthy gardens in Sibságar

43. There were 10 unhealthy gardens in Sibságar in 1887, against 15 in the previous year, as shown below:—

Sub-division.	Name of garden.	Mean strength.		Deaths.			Ratio per mille.			Deaths among Act labourers.	
		First half year.	Second half year.	First half year.	Second half year.	Total	First half year.	Second half year.	Annual.	Number.	Ratio per mille
Sadr division.	Kassomari.....	220	187	18	38	56	81·8	203·2	285·0	41	465·9
	Banfera.....	314	295	16	28	44	50·9	94·9	145·8	27	133·0
	Lakwa	458	554	31	15	46	67 6	27·0	94 6	16	52·8
	Diroibari	323	294	27	3	30	83·5	10·2	93·7	27	137·2
	Theialbari.....	195	231	16	16	32	82·0	69·2	151 2	20	217·3
Jorhát.....	Selang	1,069	1,160	36	52	88	33·6	44·8	78·4	43	111·6
	Khamikar	112	109	2	15	17	17·8	137·6	155·4	6	79·4
	Hatichungi ...	358	410	12	32	44	33·5	78 0	111·5	21	93·4
	Panbari	126	119	8	5	13	63·4	42·0	105·4	1	32·2
Golághát ...	Dhansiri	577	618	25	28	53	44·3	45 3	89 6	22	100·0
	Total of unhealthy gardens.	3,752	3,977	191	232	423	50·9	58·3	109·2	...	...
	Total of District	71,487	74,078	1,187	1,595	2,782	16·6	21·5	38·1	...	...
	Balance, *i.e.*, healthy gardens.	67,735	70,101	996	1,363	2,359	14 7	19·4	34·1	...	...

The following table shows the causes of deaths on the above gardens:—

Name of sub-division.	Name of garden.	Cholera.	Dysentery.	Fever.	Dropsy.	Other causes.	Total.
Sadr sub-division.	Kassomari	13	26	1	4	12	56
	Banfera	12	15	2	1	14	44
	Lakwa	38	3	3	.....	2	46
	Diroibari	26	2	.....	....	2	30
	Theralbari	26	3	.....	1	2	32
Jorhát	Selang	12	26	16	5	29	88
	Khanikar	.....	9	5	.....	3	17
	Hatichungi	2	16	11	6	9	44
	Panbari	.....	7	2	2	2	13
Golághát ...	Dhansiri	19	20	2	5	7	53
	Total	148	127	42	24	82	423

It will be observed that five out these ten gardens are on the list owing to the prevalence of cholera, but three of these, *viz.*, Dhansiri, Theralbari, and Lakwa, have been on the list before.

The Deputy-Commissioner reports—

"Khanikar, Hatichungi, Panbari, and Dhansiri were on the list of unhealthy gardens in 1886. Dhansiri was also on the list of 1884, and Theralbari was on the lists of 1883 and 1884 and Lakwa was on the list of 1884. Banfera and Diroibari are for the first time on the black list.

"It will be seen that 11 gardens on the black list for 1886 no longer appear on it for 1887. Dehingiapar, which was on the list for 1884, 1885, 1886, has improved very greatly. I held a committee on this garden, and sent up the proceedings to the Commissioner with the recommendations of the committee. It disappears from the list for 1887.

"The Civil Surgeon has inspected up to date 13 gardens, among which are four of the unhealthy gardens for 1887. The remaining six will be inspected by him shortly. I am now considering in what cases we should hold committees.

"*1. Dhansiri.*—The following remarks were recorded by the Civil Surgeon on his visit of inspection of the Dhansiri tea-garden:—'There are two sets of lines, the old and the larger set is on low ground with imperfect drainage, and surrounded with grass jungle. During the rains the greater part of site is under water, and is totally unsuited for habitation. The new and smaller set is on a tolerably higher ground, and pretty healthy.' He does not consider the water-supply either good or abundant.

"He, therefore, recommends the abandonment of the old lines altogether, and the removal of the occupants to the new lines as soon as they are built.

"With regard to the water-supply, he has recommended that a tank (as described by him and on the site indicated by him) should be made.

"He also takes objection to the supply of medicines, which ought to be of a better quality, fresh and unadulterated, and yearly indented for.

"2. *Diroibari.*—The high mortality in Diroi was due to an epidemic of cholera, which broke out among the coolies after drinking the Diroi water. In order to avoid another epidemic the manager has built a new set of lines, and has sunk three wells. The Civil Surgeon is of opinion that these changes will improve the health of the whole garden.

"3, 4. *Lakwa and Theralbari.*—The two gardens belong to the same proprietor, and the coolies are freely transferred from one garden to the other. The high mortality in these gardens was due to cholera. The manager suspects that new coolies brought cholera into the garden from the depôt.

"The coolies were reported 'healthy' from off the steamer, but very shortly after their arrival on the garden cholera broke out among them, and then spread rapidly among the other coolies.

"5. *Kassomari.*—The high mortality in this garden was (according to the manager) due to the inferior quality of the imported coolies, who were brought up without medical examination. It was the newly imported unacclimatised coolies who swelled the death-rate in the garden. Out of 56 deaths, 27 resulted from bowel-complaints alone. This probably had something to do with the water-supply of the place. Kassomari has never been on the black list before. It will, however, be probably visited by a Committee.

"6. *Banfera.*—The largest number of deaths in the garden resulted from fever. This possibly was owing to the lines being too close to the jungle. I have requested the Civil Surgeon to visit the garden at an early date, a full report of his inspection will be sent later on.

"7. *Khanikar.*—The water-supply of the garden is not good; in the rains the coolies drink from a tank, of which the water is reported to be of the colour of pea soup, and is singularly uninviting. There is jungle near the lines, and the houses are too close to admit of proper ventilation. The unhealthiness of the garden is possibly due to these causes. There is neither hospital accommodation nor provision for isolating contagious diseases. The garden has no medical officer. The Native Doctor of Holunguri occasionally visits the garden. The medical stores are very scanty.

"8. *Selang.*—Half the number of deaths in this garden was from bowel-complaints. The manager attributes the high mortality to a very bad stamp of coolies imported last year. Besides this, he says, Selang is the central factory of the Jhanzi Association; most of the bad cases of the

out gardens are sent in here; many of these cases prove fatal, hence the death-rate is higher than it would be under ordinary circumstances.

"9. *Hatichungi.*—The mortality was very high among the non-Act coolies, especially among children. 'The garden,' says the Civil Surgeon, 'suffered from a cholera epidemic, which arose from drinking the Diroi water. From the same cause, whenever cholera prevails at Hatichungi, it prevails at Hatigarh, which is situated on the same river higher up.' As a precaution, he recommends 'to sink wells for drinking purposes.' 'The ordinary detached lines, especially the front ones,' he notices, 'are irregularly and closely built, irrespective of free ventilation.'

"10. *Panbari.*—In a small garden like this the percentage of deaths is no criterion of healthiness. The garden looks healthy. But there were many deaths last year from bowel-complaints. The drinking water and the present site might have something to do with the prevalent dysentery. The manager is going to move the lines and build them afresh on a new site, and sink new wells for the new lines."

The Commissioner should at once consider the question of holding Committees on Kassomari, Banfera, and Khanikar, in each of which there is a very high mortality independently of cholera; Panbari should be carefully watched, and further enquiry should be made regarding Hatichungi, the high mortality on which would seem from the table above not to be due, as the Civil Surgeon seems to suppose, to a cholera epidemic.

Unhealthy gardens in Nowgong.

44. Two gardens are returned as unhealthy in Nowgong, against 4 in 1886 and 3 in 1885. They are shown below:—

Name of garden.	Mean strength.		Deaths.			Ratio per mille.			Deaths among Act labourers.	
	First half year.	Second half year.	First half year.	Second half year.	Total.	First half year.	Second half year.	Annual.	Number.	Ratio per mille.
Kuthari	227	214	12	5	17	52·8	23·3	76·1	3	54·5
Palkhoi	165	183	10	3	13	60·6	16·4	77·0	7	179·6
Total of unhealthy gardens	392	397	22	8	30	56·1	20·1	76·2	...	...
Total of the district	13,031	12,975	181	235	416	13·8	18·1	31·9	...	...
Balance, *i.e.*, healthy gardens	12,639	12,578	159	227	386	12·5	18·0	30·5	...	...

The following table shows the causes of mortality:

Name of garden.	Cholera.	Dysentery.	Fever.	Dropsy.	Anæmia.	Other causes.	Total.
Kuthari	4	1	8	3	.....	1	17
Palkhoi	.....	2	.....	1	.....	10	13
Total	4	3	8	4	.....	11	30

The Deputy-Commissioner reports as follows:—

"*Kuthari.*—This garden appeared in the unhealthy list of 1884. It employs both Act and non-Act coolies. It was healthy in 1885 and 1886. The death-rate is high only among non-Act labourers, being 8·00, whereas the death rate among Act coolies is 5·45. This garden was carefully inspected by the Civil Surgeon on the 29th September 1887. The following remarks were made by him:—

"'The source of water-supply for drinking is the Deopani river, a small stream, a well in a ravine. The water is abundant, not more liable to contamination than such unprotected water-supply. In last inspection report it was pointed out that the water-supply was objectionable. A good well with a covered mouth and pump, reservoir and taps, should be provided. I consider the present plan defective and unsafe.

"'In last inspection it was remarked that only one non-Act individual was shown as having died from 17th February to 18th December 1886, whereas under present management 13 non Act persons have died; 4 deaths from cholera as well as other recorded cases, point to an unprotected water-supply.'

"*Palkhoi.*—This garden appeared in the unhealthy list of 1885. It is worked by both Act and non-Act labourers. The death-rate among Act coolies was very high during 1887, being 17·96, or 7 deaths on an average 42 persons. Of these, 3 deaths were from accidental drowning. Exclusive of these 3 deaths, however, the rate would be 9·5. The death-rate for the last five years on this garden among Act coolies is 1886, 4·00; 1885, 5·59; 1884, 11·42; 1883, 10·32; 1882, 5·55. In comparison with the above figures, the death rate in 1887 is excessive, although the fact that the number of labourers on which the death-rate was calculated is small should be taken into consideration, and Commissioner in paragraph 2 of his letter of 30th December 1887 observed that the death-rate calculated on so

small a number was not important. The Civil Surgeon made a thorough inspection of this garden on the 28th September 1887. His remarks are as follows :—

"'The coolies bathe in a small stream that passes just below the lines between them and the Government road It communicates with marshy parts and a branch stream higher up, which is used for bathing and flows into it. It is used for drinking, bathing, and washing of clothes is carried on in it. The water is abundant, the drainage from the lines in wet weather flows into it, as also water from the ravines and *bils* around. The water-supply is unprotected from contamination. Hitherto it appears that the place has been free from cholera, but there is considerable risk should epidemic disease arise.'

"Copies of the above remarks were sent at once to the manager of the garden, as well as to the Calcutta agents, who have pressed the manager to rectify the defects."

Besides these, other gardens which were on the black list last year, Barkandali, Balikusi, Rangamati, and Sagunbari, were inspected by the Civil Medical Officer and Deputy-Commissioner, who report that matters have much improved and that the managers have taken the necessary steps to remedy the defects in water-supply or in other respects pointed out.

Unhealthy gardens in Darrang.

45. The number of unhealthy gardens in Darrang was 10 against 8 in the preceding year. They are shown below:—

Name of garden.	Mean strength.		Deaths.			Ratio per mille.			Deaths among Act labourers.	
	First half year.	Second half year.	First half year.	Second half year.	Total.	First half year.	Second half year.	Annual.	Number.	Ratio per mille.
Namgaon	343	376	12	17	29	34·9	45·2	80·1	27	132·6
Nahorani	507	531	13	28	41	25·6	52·7	78·3	30	108·5
Bindukuri	751	608	12	38	50	15·9	62·5	78·4	32	66·1
Daputa	416	447	24	14	38	57·6	31·3	88·9	29	170·8
Dhulapadang	333	400	18	11	29	54·0	27·5	81·5	20	149·3
Gellahating	376	390	13	24	37	34·5	61·5	96·0	16	143 7
Pratabgarh	818	786	153	33	186	187 0	41 9	228·9	123	289·4
Behali	708	684	17	33	50	24·0	48·2	72·2	22	126·8
Ghogra	150	147	5	6	11	33·3	40·8	74·1	1	50·0
Tokonkata	1 8	139	9	4	13	65·2	28·7	93·9	...	...
Total of unhealthy gardens...	4,540	4,508	276	208	484	60·7	46·1	106·8	...	...
Total of district .	30,546	32,262	640	654	1,294	20·9	20·2	41·1	...	...
Balance, *i e.*, healthy gardens.	26,006	27,754	364	446	810	13·9	16·0	29·9	...	...

The following table shows the causes of deaths:—

Name of garden.	Cholera.	Dysentery.	Fever.	Dropsy.	Anæmia.	Other causes.	Total.
Namgaon	...	15	1	3	...	10	29
Nahorani	1	11	...	5	...	24	41
Bindukuri	6	22	...	7	...	15	50
Daputa	12	11	...	5	...	10	38
Dhulapadang	10	6	2	3	...	8	29
Gellahating	2	9	6	8	...	12	37
Pratabgarh	125	23	8	6	...	24	186
Behali	7	17	8	11	...	7	50
Ghogra	2	4	2	...	...	3	11
Tokonkata	...	3	2	2	...	6	13
Total	165	121	29	50	...	119	484

The Deputy-Commissioner reports as follows:—

"*Namgaon.*—As in the previous year, this year also has been unhealthy, with 29 deaths, against 35 in 1886. It was inspected by the Civil Surgeon on the 27th May 1887. He states—

"'The site of the lines is good, a great part of the straggling lines has been improved, plinths have been improved, and the houses improved and the houses made closer together so that the lines can be kept clear, and free from jungle.'

"'This year the garden is fairly healthy, only 7 deaths among Act coolies and one among non-Act, or a total of 8 deaths out of a present strength of 487, which is equivalent to 1 64 per cent.'

"Since the inspection by the Civil Surgeon there have been many deaths, nearly all due to dysentery. There were seventeen deaths in the second half year. Of the 27 deaths of Act coolies, 17 are of new arrivals. Doctor Warburton attends this garden, and the people are well looked after. The manager is now erecting new lines on a good site, and digging a new large *pucca* well, which will no doubt improve the health of the people. The sickness is attributed to a bad lot of coolies imported, as the garden is not an unhealthy one.

"*Nahorani.*—This garden, with forty-one deaths, appears for the first time in the list of unhealthy gardens. The Civil Surgeon has inspected this garden on the 30th December 1881. He states—

"'The garden is healthy, but for dysentery and dropsy, which is really the last stage of dysentery in many cases. The lines are good, the medical arrangements good, and the coolies well cared for.'

"The death-rate for the past three years is—

Year.	Act.	Non-Act.
1885.	5 55	2·07
1886.	5 09	3·78
1887.	10·89	4·45

"As in the case of Namgaon, the deaths were among new coolies.

"*Bindukuri.*—This garden has also for the first time appeared in the black list. It was inspected by the Civil Surgeon on the 24th May last.

"Of the 50 deaths, 22 were from dysentery, 6 from cholera, 7 dropsy, and 15 other causes. Twenty-seven deaths were among new coolies.

"This garden is an old one, situated in an open and healthy part of the district, only nine miles from Tezpur, and close to a large weekly hát; and there is no reason why it should be unhealthy. The cause must be due to a bad class of immigrants.

"*Daputa.*—This garden still continues to show a high death-rate. It was inspected by the Civil Surgeon on the 17th May last, and his remarks are as follows:—

"'The death-rate is very high among Act coolies, principally owing to a number of deaths from dysentery at the end of 1886, and to an epidemic of cholera in April 1887.

"'9 out of 10 deaths from cholera occurred in a batch of coolies for Dhulapadang, which reached this garden on 8th April, and of which 4 died on the 13th April, and the rest at different dates, the last fatal case being on 2nd May.

"'The coolies are well cared for, the lines good, the pay good, medical attendance good, and water supply good. This is the second year that cholera has occurred in an epidemic form in this garden. Each time the disease has been introduced from without. It did not spread, as segregation was carried out very strictly, and the disease was arrested. All new coolies for Daputa or Dhulapadang are segregated here for some time.'

"If the deaths from cholera which cannot be attributed to the garden are deducted, the death-rate would not have brought this garden into the black list, being below 7 per cent.

"*Dhulapadang.*—Dhulapadang appeared in the list of the unhealthy gardens previous year. This year also has been unhealthy, with 29 deaths. It was inspected by the Civil Surgeon on the 25th May 1887. He states—

"'This garden has been very healthy, but for the epidemic of cholera which has for the second time broken out, 6 Act and 4 non Act coolies died during April and May. The coolies have been moved from the affected lines to new lines, and the old lines, in which cholera raged both in April 1886 and April 1887, were abandoned.'

"As in the case of Daputa, if the cholera cases are excluded, this garden would not be deemed unhealthy.

"*Pratabgarh.*—This garden has not been on the unhealthy list for some years. The high death-rate is due to an outbreak of cholera. A separate report from the Civil Surgeon on this was forwarded to the Commissioner with this office No. 120E., dated 13th May last, extract of which is as follows:—

"'I visited Pratabgarh on Monday, 9th instant, to inspect the outbreak of cholera there. There were 76 deaths up to the time I left, but a number of fresh cases was occurring, and the epidemic showed no sign of abating.

"'I cannot write a full account until the epidemic ceases, but simply note that the outbreak commenced in a batch of coolies landed per *Núga* on the 8th April, the first case taking ill on the 11th or 12th and dying on 13th. It spread through this batch, and they were segregated in some huts on the Government road It stopped for a few days, and then broke out again. It spread to the new lines, and is raging there now. The water-supply is very bad, owing to the contractor failing to supply bricks. Wells could not be made, and only the water of the Ghilladhari is used, which, being a small stream with very little current, is not a desirable source of supply.

"'If the epidemic continues, the coolies should be moved *en masse* to Sadharu or some other spot, for 10 or 12 days, as nothing can be done on the spot to arrest its progress until the water-supply is improved.

"'Dr. Foley is resident, and he and the other Europeans are doing all in their power to alleviate the distress by untiring attention to the sick, and cheering and indulging the men'

"This garden was also inspected by the Civil Surgeon on the 15th August last. He stated in his report:—

"'The whole of the death-rate nearly is due to an epidemic of cholera; 132 deaths out of 160 are due to cholera. This epidemic was introduced on the garden by a batch of new coolies, and spread among them all. The water supply is bad and deficient, and a small nadi the Ghilladhari, had to be used. The consequence was, the epidemic lasted till the rains began.

"'Mr. Stewart, the Superintendent, has built one reservoir, with pumps and taps, and a second is nearly ready. A third, perhaps a fourth, should also be built. Everything else is good.'

"The high death-rate in this garden is entirely due to the frightful epidemic of cholera. Such gardens should not, I think, be classed as unhealthy, but should be separately dealt with. There is no doubt the cholera was imported, as the disease did not exist in the part of the district where this garden is situated.

"*Gellahating.*—Of the 37 deaths on this garden, 13 deaths occurred in the first half-year, and 24 in the second half-year. This garden was inspected by Mr. Waller, the Assistant-Inspector of Labourers, on the 16th May last.

"Half of the deaths is among children, and dysentery and fever are the chief diseases. There were two cases of cholera, and among adults 9 deaths were among new coolies.

"*Behali.*—This garden has become unhealthy during the year. It was inspected by Mr. Waller on the 21st March last.

"Of the 50 deaths, 20 are those of children, and 21 of the deaths of adults are those of new coolies. These 7 deaths were due to cholera, but the principal diseases are fever and dysentery.

"*Ghogra.*—This garden was inspected on the 27th March last, and was not then found to be unhealthy; there had been 5 deaths in the first half-year, and 6 in the second half-year, of the total 11 deaths, 7 children, 1 Act, and 3 non-Act adults.

"This is not an unhealthy garden. Of the 11 deaths 7 are those of children; only 1 Act coolie died out of 2. Hence the 50 per cent.

"*Tokonkata.*—This non-Act garden in Mangaldai sub-division was inspected by the sub-divisional officer on 20th May 1887. In the inspection report the Assistant-Commissioner reports—

"'This is a non-Act garden, so I have not filled in the usual form. The labour force consists of time expired Bengalis and Kacharis residing on the garden and non-resident Assamese.

"'The huts are clean and good. The water is derived from a well and from the Duanadimukh, where they also bathe. The labourers seem clean and healthy.'"

The Behali garden should be carefully watched.

It will be observed that the extracts quoted above contain frequent reference to the physical unfitness of the coolies imported. This matter is referred to also in another connection in paragraph 9 of this report; it is one to which the Chief Commissioner's attention is constantly being drawn by the inspection reports which come before him, and it is one to which, as it appears to him, the earnest attention of employers should be invited. One would suppose that a regard for their own interest would lead employers to insist on some sort of medical examination which would protect them against unscrupulous contractors, who do not hesitate to send them coolies so utterly unfit that they either break down or die, in either case entailing a serious loss on the planter. It is further to be borne in mind that if so large a proportion of coolies, unfit to stand the climate and work, continues to be imported, it may be necessary to revert to the system of compulsory official medical examination, which would probably be more expensive.

CHAPTER IX.—Births.

Birth-rate.

46. The birth-rate has again decreased, in spite of the increase of the population, and this result can only be due to inaccurate reporting. The statement below gives the births and deaths and the ratio of each per mille for eight years:—

Year.	Births.	Deaths.	Birth-rate per mille.	Death-rate per mille.
1887	9,043	11,633	28·2	36·2
1886	8,740	12,059	29·0	39·8
1885	9,466	10,711	32·6	36·8
1884	8,629	11,583	32·2	43·2
1883	7,887	9,535	34·3	41·3
1882	7,824	7,590	39·1	37·8
1881	7,122	6,171	36·6	31·7
1880	5,904	6,657	31·3	35 2

The following statement gives the figures for each district separately, with the proportion borne by the births to the mean strength of the district labour force:—

District.	Annual strength.		Number of births.		Birth-rate per mille.	
	1886.	1887.	1886.	1887.	1886.	1887.
Sylhet	54,397	58,673	1,718	1,881	31·5	32·0
Cachar	83,334	87,670	2,745	2,991	32·9	34·1
Lakhimpur	51,104	53,988	1,411	1,372	27·6	25·4
Sibságar	68,959	72,782	1,882	1,864	27·2	25·6
Nowgong	12,680	13,003	302	293	23·8	22·5
Darrang	27,983	31,404	563	553	20·1	17·6
Kámrúp	2,890	2,884	119	89	41·1	30·8
Total	301,349	320,408	8,740	9,043	29·0	28·2

Sylhet and Cachar are the only districts in which the [illegible]reased.

The same figures are compared with the corresponding death statistics in the statement below:—

District.	Number of deaths.	Number of births.	Death-rate. Order of demerit.	Death-rate. Rate per mille.	Birth-rate. Order of demerit.	Birth-rate. Rate per mille.
Sylhet	1,884	1,881	4	31 9	6	32·0
Cachar	2,663	2,991	6	30·3	7	34·1
Lakhimpur	2,503	1,372	1	46·3	3	25·4
Sibságar	2,782	1,864	3	38·1	4	25·6
Nowgong.....	416	293	4	31·9	2	22·5
Darrang	1,294	553	2	41·1	1	17·6
Kámrúp	91	89	5	31·4	5	30·8
Total.....	11,633	9,043	...	36·2	...	28·2

Cachar, as in former years, is the only district in which the births exceed the deaths in number.

47. The following table distributes the births among the different nationalities, and strikes the ratio on the number of women:—

Birth-rate according to nationality.

District.	Bengal			North-Western Provinces, Oudh, and Behar.			Chota Nagpur.			Nepal.		
	Annual strength of women employed under Act I. or otherwise.	Births.	Birth-rate per mille.	Annual strength of women employed under Act I. or otherwise.	Births.	Birth-rate per mille.	Annual strength of women employed under Act I. or otherwise.	Births	Birth-rate per mille.	Annual strength of women employed under Act I. or otherwise.	Births.	Birth-rate per mille.
Sylhet.....	5,630	421	74 7	7,418	864	116 4	4,746	566	119·2	4	...	...
Cachar.....	8,531	1,015	118·9	6,201	1,117	180·1	7,219	846	117·1	49	2	40·8
Lakhimpur..... .	2,318	126	54·4	931	37	39·7	12,083	1,202	99 4	13	...	...
Sibságar	4,978	343	68 9	2,918	237	81·2	12,154	1,260	103·6	8	...	...
Nowgong	778	52	66·8	143	20	139·8	2,064	159	77·0	9	2	222·2
Darrang	2,529	274	108·3	935	11	11·7	4,680	214	45 7	8	1	125·0
Kámrup	407	34	83 5	7	2	285·7	353	41	116·1	10	1	100 0
Total of 1887...	25,170	2,265	89 9	18,555	2,288	123 3	43,303	4,288	96 7	102	6	58·8
„ 1886...	24,868	2,292	92·1	17,318	2,112	121·9	39,670	4,132	104 1	126	5	39·6

District.	Madras.			Bombay.			Assam.			Total.		
	Annual strength of women employed under Act I. or otherwise.	Births.	Birth-rate per mille.	Annual strength of women employed under Act I. or otherwise.	Births.	Birth-rate per mille.	Annual strength of women employed under Act I or otherwise.	Births.	Birth-rate per mille.	Annual strength of women employed under Act I. or otherwise.	Births.	Birth-rate per mille.
Sylhet.....	382	26	68·0	6	...	...	15	4	266·6	18,203	1,881	103·3
Cachar	164	6	36·5	101	4	39·6	52	1	19·2	22,320	2,991	134·0
Lakhimpur	39	3	76·9	.....	...	...	86	4	46 5	15.467	1,372	88·7
Sibságar	28	...	...	7	...	...	563	24	42·6	20,658	1,864	90·2
Nowgong	20	...	...	.....	...	...	577	60	103 9	3,591	293	81·5
Darrang	25	1	40·0	.....	...	...	953	52	54 5	9,130	553	60·5
Kámrup	.....	...	...	.....	...	...	80	11	137·5	859	69	703·6
Total of 1887...	660	36	54 5	114	4	35·0	2,324	156	67·1	90,231	9,043	100·2
„ 1886...	612	57	93·1	125	6	48·0	2,169	136	62·7	84,911	8,740	102·9

48. The portions of the Sanitary Report for 1887 relating to tea-s reproduced as an Appendix. It will be observed that the statistics given in Sanitary Report differ from those of this report, the reason being that the figures in the former are compiled from the monthly vital statistical returns, while those of the latter are based on the half-yearly immigration returns, both of which are supplied by employers of labour. The returns last mentioned are often revised by Deputy-Commissioners.

Return showing the Statistics of the Labour Force of

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		Additions made during the year 1887.												
		Imported.			Otherwise than by importation.									
Classes of labourers.	Number remaining at the end of year.	By contractors.	By garden-sardars.	Free labourers and e endents imported direct.	Number giving contract under Section 111.	Number giving contract under Section 112.	Received from other gardens.	Recovered after having been struck off as deserters.	Remaining after expiry of contract.	Otherwise obtained.	Births.	By transfer to adults from minors.	Total added.	Total of colu ns 9 and 14
Sylhet ..... Act-I. labourers (adults)	9,672	265	662	....	2,640	3	171	38	....	....	....	....	3,779	13,451
Sylhet ..... Non-Act labourers.. Adults ..	26,386	....	....	3,567	....	..	1,924	..	2,907	2 607	....	449	11,454	37,840
Sylhet ..... Non-Act labourers.. Children..	19,524	....	....	1,420	....	..	661	..	....	945	1,881	....	4,907	24,431
Total	55,582 *	265	662	4,987	2,640	3	2,756	38	2,907	3,552	1,881	449	20,140	75,722
Cachar ..... Act-I labourers (adults)	12,837	1,112	1,022	....	2,629	196	147	74	....	....	....	....	5,180	18,017
Cachar ..... Non-Act labourers .. Adults ..	35,067 †	....	....	1,578	....	..	82	..	6,244	4,716	.. ..	686	13 306	48,373
Cachar ..... Non-Act labourers .. Children..	38,456 †	....	....	810	....	..	53	..	143	925	2,991	....	4,902	43,358
Total	86,360	1,112	1,022	2,388	2,629	196	262	74	6,387	5,641	2,991	686	23,388	109,748
Surma Valley Act-I. labourers (adults)	22,509	1,377	1,684	....	5,269	199	318	112	....	....	....	...	8,959	31 468
Surma Valley Non-Act labourers .. Adults ..	61,453	....	....	5,145	....	..	2,006	..	9,151	7,923	....	1,135	24 760	86,213
Surma Valley Non-Act labourers .. Children..	57,980	....	....	2,230	....	..	694	..	148	1,870	4,872	....	9,809	67,789
Total	141,942	1,377	1,684	7,375	5,269	199	3,018	112	9,294	9,193	4,872	1,135	43,528	185,470
Kámrúp .... Act-I. labourers (adults)	553	12	98	....	22	13	8	1	....	....	....	....	154	707
Kámrúp .... Non-Act labourers .. Adults ..	1,267 ‡	....	....	17	....	..	28	..	205	524	....	29	783	2,049
Kámrúp .... Non-Act labourers .. Children ..	974 ‡	....	....	54	....	..	10	..	....	108	89	....	277	1,251
Total	2,794	12	98	71	22	13	41	1	205	632	89	29	1,213	4,007
Darrang .... Act I. labourers (adults).....	9,607	1,910	2,010	...	2,741	379	138	75	....	....	....	....	7,253	16,860
Darrang .... Non-Act labourers.. Adults ..	10,999	....	....	230	....	..	67	..	2,568	4,606	....	255	7,626	18,616
Darrang .... Non-Act labourers.. Children..	7,765	....	....	1,181	....	..	74	..	...	550	553	....	2,358	10,123
Total....	28,362	1,910	2,010	1,411	2,741	379	279	75	2,568	5,056	553	255	17,237	45,599
Nowgong .... Act-I. labourers (adults)	2,054	375	178	....	123	8	78	9	....	....	....	....	771	2,825
Nowgong .... Non-Act labourers.. Adults ..	6,380	....	....	754	....	..	198	..	862	1,428	....	85	3,334	9,714
Nowgong .... Non-Act labourers.. Children ..	4,034	....	....	114	....	..	70	..	....	507	293	....	784	4,818
Total....	12,468	375	178	878	123	8	346	9	862	1,732	293	85	4,889	17,357
Sibságar .... Act-I. labourers (adults)	26,088	3,995	2,798	....	9,768	117	760	52	....	....	....	....	17 490	43,578
Sibságar .... Non-Act labourers.. Adults ..	17,060	....	....	285	....	..	615	..	4,876	2,918	....	448	9,142	26,202
Sibságar .... Non-Act labourers.. Children...	25,219	....	....	1,563	....	..	227	..	....	1,649	1,664	....	4,303	30,522
Total....	68,367	3,995	2,798	1,848	9,768	117	1,602	52	4,876	4,567	1,664	448	31,935	100,302
Lakhimpur .. Act-I. labourers (adults)	16,065	3,733	3,469	....	1,534	271	482	39	....	....	....	....	9 498	26,163
Lakhimpur .. Non-Act labourers.. Adults ..	16,872	....	....	1,010	....	..	204	..	3,026	1,514	....	285	6,039	22 911
Lakhimpur .. Non-Act labourers.. Children...	16,638	....	....	2,231	....	..	75	..	145	312	1,372	....	4,165	20,853
Total....	50,225	3,733	3,469	3,241	1,534	271	781	39	3,171	1,826	1,372	285	19,702	69,927
Brahmaputra Valley. Act-I. labourers (adults).....	54,967	10,025	8,553	....	14,188	788	1,436	176	....	....	....	....	35 166	90,133
Brahmaputra Valley. Non-Act labourers.. Adults ..	52,569	....	....	2 408	....	..	1,107	..	11,537	10,887	....	1,102	26,923	79,492
Brahmaputra Valley. Non-Act labourers.. Children...	54,680	....	....	5,142	....	..	456	..	145	2,956	4,171	...	12,887	67,567
Total....	162,216	10,025	8,553	7,449	14,188	788	2,999	176	11 682	13,843	4,171	1,102	74,976	237,192
Total for the Province. Act-I. labourers (adults).....	77,476	11,402	10,237	....	19,457	987	1,754	288	....	..	....	.	44,126	121 601
Total for the Province. Non-Act labourers.. Adults ..	114,022	....	....	7,451	....	..	3,113	..	20,688	18,210	....	2,237	51,682	165,704
Total for the Province. Non-Act labourers.. Children...	112,060	....	....	7,373	...	..	1,150	..	283	4,526	9,043	....	22,596	135,356
Total....	304,158	11,402	10,237	14,824	19,457	987	6,017	288	20,976	22,036	9,043	2,237	118,504	422,662

* The difference of 417 labourers between this entry and that shown in column 30 of the statement at the end of the report for 1886 is due to non submission of the return
† The difference of 2,618 labourers between these entries and those shown in column 30 of the statement at the end of the report for 1886 is due to the inclusion of figures for
‡ Re-classified.

the Tea-gardens in the Province of Assam during the year 1887.

16	17	18		19		20	21	22	23	24	25	26	27		28	29	30	31	32		33
Deductions made during the year.																	Number remaining at the end of the year 1887.	Strength on 1st July 1887.	Annual strength		Death rate per mille.
Transferred to other gardens.	Left the garden with permission.	Deaths. First half year.	Deaths. Second half year	Desertions. First half year.	Desertions. Second half year.	By transfer from minors to adults.	Number giving agreements under Section 111.	Number giving agreements under Section 112.	Cancelment under Sections 111, 149, or 177.	Cancelment for permanent unfitness under Section 122.	Expiry of time, Section 141.	Redemption, Section 142.	Suspended under Section 120.	Cancelled under Section 129.	Number dissolved by mutual consent.	Total deducted.			First half.	Second half.	
190	....	158	255	497	404	....	....	....	4	34	2,875	1	..	14	21	4,448	9 003	9,227	9,440	9,115	44 1
193	3,336	312	508	1,134	874	....	942	3	....	....	....	..	..	..	..	7,302	30,338	29,171	27,778	29,754	28·2
150	1,347	309	347	336	274	449	....	....	....	....	....	..	..	..	..	3,112	21,319	20,829	20,176	21,074	31·7
733	4,583	774	1,110	1,967	1,552	449	942	3	4	34	2,875	1	..	14	21	15,062	60,660	59,227	57,404	59,943	31 9
147	....	257	287	470	435	....	....	....	....	3	5,803	8	..	..	41	7,451	10,566	10,287	11 [illegible]	10,494	49 7
68	5,917	538	505	836	708	....	1,393	24	....	....	....	..	..	..	..	9,987	38,386	38,741	38,904	38,563	27 5
24	1,318	536	540	370	314	686	....	....	....	....	....	..	..	..	..	3,788	39,670	38,876	38,666	39,223	27 5
239	7,235	1,331	1,332	1,676	1,455	686	1,393	24	....	3	5,803	8	..	..	41	21,226	88,522	87,900	87,130	88,211	30·8
337	....	410	542	967	830	....	....	....	4	37	8,678	9	..	14	62	11,899	19,569	19,510	21,008	19,539	47 2
461	9,253	850	1,618	1,970	1,580	....	2,335	27	....	....	....	..	..	..	..	17,489	68,724	67,912	61,682	68,316	27 9
174	2,565	845	887	706	588	1,135	....	....	....	....	....	..	..	..	..	6,900	60,889	59,705	58,842	60,297	29 0
972	11,818	2,105	2,442	3,643	3,007	1,135	2,335	27	4	37	8,678	9	..	14	62	36,288	149,182	147,127	144,734	148,154	30 9
1	....	5	9	3	9	....	....	....	1	....	228	..	..	..	..	256	451	482	517	466	28 9
1	527	17	12	16	38	....	11	10	....	....	....	..	..	..	..	632	1,417	1,541	1,404	1,479	29 2
3	270	20	18	2	7	29	....	....	....	....	....	..	..	..	..	359	892	969	971	930	59 1
5	797	52	39	21	54	29	11	10	1	....	228	..	..	..	..	1,247	2,760	2,992	2,893	2,876	31·4
138	....	364	394	296	200	....	....	....	....	30	3,364	1	..	..	..	4,780	12,080	11,592	10,599	11,836	67 5
87	4,923	104	129	151	83	....	2,101	104	....	....	....	..	..	..	..	7,602	10,954	12,493	11,741	11,722	19·2
74	603	172	131	23	18	255	....	....	....	....	....	..	..	..	..	1,268	8,760	8,645	8,205	8,702	36·2
279	5,676	640	654	460	301	255	2,101	104	....	30	3,364	1	..	..	..	13,805	31,794	32,730	30,546	32,262	41 1
169	....	42	54	45	39	....	....	....	....	52	606	..	..	..	1	1,008	1,817	1,873	1,863	1 845	50 5
345	2,501	95	93	186	100	....	82	....	....	....	....	..	..	..	..	3,407	6,307	7,036	6,953	6 931	27·7
65	252	44	83	42	16	85	....	....	....	....	....	..	..	..	..	587	4,231	4,186	4,110	4,298	30·4
579	2,753	181	235	273	155	85	82	....	....	52	606	..	..	..	1	5,002	12,355	13,095	13,031	12,975	31 9
778	....	590	871	479	392	....	....	....	1	71	11,553	4	..	..	94	14,833	28,745	29,146	27,617	28 945	51 3
271	3,733	243	284	271	339	....	3,114	38	....	....	....	..	..	..	..	8,243	17,959	18,869	17,854	18,414	26 2
304	1,688	354	490	183	215	448	....	....	....	....	....	..	..	..	..	3,681	26,841	26,796	26,007	26,818	31 8
1,352	5,421	1,187	1,595	943	946	448	3,114	38	1	71	11,553	4	..	..	94	26,757	73,545	74,611	71,487	74,078	38 1
452	....	658	695	394	482	....	....	....	....	500	3,816	26	..	..	79	7,102	19,061	19 468	18,066	19,264	72 4
204	3,830	349	224	185	100	....	892	115	....	....	....	..	..	..	..	5,798	17,113	17,987	17,424	17,515	26 8
75	1,558	297	381	92	40	285	16	....	....	....	....	..	..	..	..	2,744	18,109	18,279	17,483	18,194	37·8
731	5,388	1,204	1,299	671	622	285	908	115	....	500	3,816	26	..	..	79	15,644	54,283	55,724	52,971	55 003	46 3
1,538	...	1,659	2,028	1,207	1,125	....	....	....	2	658	19,567	31	..	..	174	27 979	62,154	63,661	58,764	62,857	60·6
888	15,514	708	696	809	680	....	6,200	267	....	....	....	..	..	..	..	25,742	56,750	58,216	55 392	5[illegible]	[illegible]
520	4,461	597	1,108	342	293	1,102	16	....	....	....	....	..	..	..	..	8,734	58,833	58,875	56,777	58,554	34 4
2,946	19,975	3,264	3,822	2,[illegible]	2,078	1,102	6,216	267	2	658	19,567	31	..	..	174	62,455	174,737	179,852	170,934	177,194	40·5
1,875	....	2,009	2,5[illegible]	2,174	1,964	....	....	....	6	690	28,245	40	..	14	236	39,878	81,728	82,071	7,977[illegible]	81,897	57·2
1,349	24,767	1,558	1,709	2,179	2,240	....	8,535	294	....	....	....	..	..	..	..	43,231	122,474	126,128	120,075	124,301	28 8
684	7,026	1,742	1,990	1,048	801	2,237	16	....	....	....	....	..	..	..	..	15,634	118,722	118,580	115,620	119,181	31 7
[illegible]	31,793	5,[illegible]	6,264	6,001	5,085	2,237	8,551	294	6	690	28,245	40	..	14	236	98,743	323,919	326,779	315,468	325,349	36 2

of Act labourers by the proprietor of one garden and the returns of non-Act labourers by the proprietors of two gardens the Lolu teagarden this year, the manager of which had refused to submit return in 1886.

APPENDIX.

TABLE 4.

Showing the registration of births and deaths on tea gardens in the following districts of the Province during the year 1887.

Districts.	Mean population of year according to Immigration Report.	Total births.	Ratio of births per 1,000 of the population.	Deaths.								
				Cholera.	Small pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	Total deaths.	Ratio of deaths per 1,000 of the population.	Ratio of deaths per 1,000 of general population.
Kámrúp	2,884	98	33 98	6	...	48	27	1	67	149	51 66	22 83
Darrang	31,403	543	17·29	200	4	120	293	12	554	1,183	37 67	31·32
Nowgong	13,003	293	22·53	27	...	92	74	16	195	404	31·07	17 81
Sibságar	72,776	1,768	24·29	337	13	277	803	31	1,068	2,529	34 75	22·09
Lakhimpur	53,988	1,356	25 12	511	6	287	593	48	977	2,422	44 86	30·99
Sylhet	58,644	1,756	29 94	189	1	371	491	16	766	1,834	31 27	21·14
Cachar	87,670	2,973	33 91	493	2	506	635	89	991	2,666	30 41	28· 16
Total	320,368	8,787	27 42	1,763	26	1,701	2,916	163	4,618	11,187	34·92	22 87

Vital statistics of tea-gardens.

10. The preceding table figures the mean average population of all the tea-gardens in the Province, together with the births and deaths, and the ratio of each per thousand. It has been repeatedly explained that, with ordinary care, these figures ought to be more reliable, and in a limited degree more valuable, than any others in the Province; simply because the totals are largely complied under educated supervision, and with official care and punctuality. But even in these we are met with the ever-recurrent defective birth registration. Deaths among the labourers, &c., are probably much more noted and reported than the births.

Statistics.

11. Taken as a whole, the mean average tea-garden population of the year was 320,368, compared with 301,817 of 1886. There were 8,787 births and 11,187 deaths registered, compared with 8,739 and 11,544 respectively in 1886; while the ratio per thousand of the former decreased from 28·95 to 27·42, and of the latter from 38·25 to 34·92. As heretofore, Cachar is the only district in which the recorded birth-rate exceeds the death-rate. It is the more satisfactory to have this evidence of effective registration in Cachar, because the tea-garden labouring population of that district is much the largest in the Province.

Comparison of tea-garden statistics with those of the general population.

12. Table 4 has been slightly modified this year. The deaths total and ratio columns have been moved to the right, so as to follow the detail of disease causes, and the last column has the ratio of mortality among the civil population in the same district. The only reliable figures carried through the whole table are those of Cachar. A similar column, showing the ratio of births in each district civil population, might have been added; but there are reasons for supposing that in some of the districts the proportion of coolie women is not so great as among the country inhabitants.

TABLE 5.

District.	Mean population of gardens.	Total deaths, 1887.	Ratio of deaths per 1,000 of population.	Deaths under 10 and over 50	Deaths from 10 to 49.
Kamrup	2,884	149	51·66	81	68
Darrang	31,403	1,183	37·67	303	880
Nowgong	13,003	404	31·07	153	251
Sibsagar	72,776	2,529	34 75	900	1,629
Lakhimpur	53,988	2,422	44·86	693	1,729
Sylhet	58,644	1,834	31·27	757	1,077
Cachar	87,670	2,666	30·41	1,232	1,434
Total ...	320,368	11,187	34·92	4,119	7,068

Mortality on tea-gardens according to working age.

13. The Army Sanitary Commission in England, when reviewing the Assam Provincial Sanitary Reports, have desired to know more particularly the mortality among the tea-garden labourers according to age. Their impression appears to be that possibly an undue proportion of deaths occur among children, and are not due to the actual disease causes of tea cultivation and extension. I regret that more particulars than are cited in Table 5 above, which has been moved to this place from Section XI., paragraph 118 of the Report for 1886, are not available for the reasons given in last year's Report. All that could be done from the return submitted was to assume a certain working-age period, *viz.*, from 10

to 49, and divide the deaths. Out of a total mortality of 11,187, it will be seen that 4,119 occurred among the children and old labourers, while 7,068, or 63·18 per cent. of the total mortality, occurred during the assumed working age. If we only knew the proportionate ages of the tea-garden labourers, the influence of exposure might to a certain extent be estimated; but this is a refinement of statistics which must be left to a period of higher registration. At present, the principal object is to obtain more complete vital statistics at large.

TABLE 6.

District.	Mean population of year according to Immigration Report	Births per 1,000 of general population.	Births. By monthly returns. Total births.	Births. By monthly returns. Ratio per 1,000.	Births. By half-yearly returns. Total births.	Births. By half-yearly returns. Ratio per 1,000.	Deaths per 1,000 of general population.	Deaths. By monthly returns. Total deaths.	Deaths. By monthly returns. Ratio per 1,000.	Deaths. By half-yearly returns. Total deaths	Deaths. By half-yearly returns. Ratio per 1,000.
Kámrúp	2,884	24·27	98	33·98	89	30·86	22·83	149	51·66	91	1·55
Darrang	31,403	26·61	543	17·29	553	17 61	31·32	1,183	37 67	1,294	41·20
Nowgong	13,003	23 06	293	22·53	293	22·53	17·81	404	31·07	416	31 99
Sibságar	72,776	24·45	1,768	24·29	1,864	25·61	22·09	2,529	34 75	2,782	38·22
Lakhimpur	53,988	28·08	1,356	25·12	1,372	25·41	30·99	2,422	44·86	2,503	46 36
Sylhet	58,644	29·67	1,756	29·94	1,839	31·36	21·14	1,834	31·27	1,925	32·83
Cachar	87,670	36 45	2,973	33·91	2,991	34·12	28 16	2,666	30·41	2,663	30·37
Total	320,368	28 03	8,787	27·42	9,001	28·09	22·87	11,187	34·92	11,674	36·44

Comparison of tea-garden vital statistics by monthly and half-yearly returns.

14. The variation which has been noticed between the vital statistics of tea-garden labourers reported in the monthly and half-yearly returns forms the subject of the above table. It will be seen that Kámrúp is the only exception to the general rule that the births and deaths reported half-yearly exceed the aggregate of the monthly figures. This is only what might be expected in a return which is compulsory. The figures, however, fairly correspond all through the principal garden districts; the higher ratio of 28·09 per thousand of births assimilating closely the 28·03 of the general population; while the death ratio from the half-yearly returns is 36·44 per thousand, compared with 22·87 in the civil population. All the Deputy-Commissioners agree in accepting the half-yearly returns as more correct, and I would recommend that they should be solely accepted in future.

* * * * * * * * *

SECTION X.—TEA-GARDENS.

Sanitary protection of immigrants.

118. The Annual Report for 1887 on Immigration into Assam through Dhubri, published at length in Part II., *Assam Gazette* of the 12th May 1888, affords satisfactory evidence of the protection which general sanitary principles, when efficiently supervised, can extend to the health and lives of the labourers imported from Bengal to the tea-gardens in the Assam Valley.

Statistics of immigration at Dhubri.

119. The medical history of immigrants from the time they came under the Rules framed under Act I. of 1882 is as follows:—25,647 coolies started from the recruiting districts, and 25,635 arrived at Dhubri. The difference is accounted for by 3 deaths, 8 absconded, 2 detained sick, and 1 birth *en route*. During detention at Dhubri there were in all 158 casualties, being ·61 per cent., against 126, or ·69 per cent., in 1886. The casualties included 18 deaths, 11 from cholera and 7 from other diseases. The admissions from cholera were 26, compared with 34 in 1886.

Statistics on the river steamers.

120. The labourers and their dependents despatched by river steamers to the tea districts numbered 25,438. The difference between these figures and 25,635 arrivals at Dhubri is due to rejections after medical inspection. During the voyage there were 24 deaths and 8 absconded; one birth occurred; 25,407 arrived at the debarkation depôts.

Mortality on the river steamers.

121. The casualties on board the river steamers were in excess of those last year. There were 24, or ·09 deaths, against 14, or ·07, in 1886. Of the 24 deaths on board, 16 were from cholera, and these occurred almost entirely during the early part of the year, corresponding with the arrival of the labourers and cholera admissions at Dhubri.

Presumptive necessity for sanitary measures between Bengal and Dhubri.

122. The evidence year after year is strengthened that the cholera which is developed on these river steamers was contracted previously. In paragraph 24 of the Immigration Report, adverting to only 3 deaths in all this mass of immigration being reported *en route* from Bengal to Dhubri, the Deputy-Commissioner justly remarks:—

"I am not inclined to place any reliance on these statistics. The coolies are for the most part free, and, as such, I fancy we know very little about them before their arrival at Dhubri."

This is perfectly true. The severe outbreak of cholera which has occurred among them in 1888 shows the necessity of extending the Assam sanitary rules further back, at least to the depôts in Bengal. It is rather hard to have the entire odium and loss of life of epidemics charged to Assam immigration, when in truth the seeds of the disease were sown elsewhere, and the immigrants arrived under sanitary protection already cholera infected.

No modifications of the rules.

123. The Rules under Act-I. worked most successfully throughout the year, and no modifications were found necessary. The Government depôt at Dhubri was abolished, but the hospital remains as before. Altogether, 79 cases were admitted, with 20 deaths. The report concludes with a well merited testimony to the care and attention bestowed by Dr. Dobson, Civil Surgeon of Dhubri, to the details of the Immigration Act, and the sanitary rules framed in accordance with it.

Army Sanitary Commission's review.

124. In paragraph 31 of their review, the Army Sanitary Commission seem to desire that the mortality among coolies while under Government sanitary rules should be worked out on an annual ratio, presumably with the object of comparison with those affecting the civil population at large or with the coolie population on tea-gardens. I find this is not practicable. The average duration of each voyage could be given as one factor, and the mortality and number of immigrants are well known; but with the varying number of passengers on each trip it would take an exhaustive process to work out the mean proportion to each individual. It cannot be taken in bulk so long as one trip of 6½ days carries 300 passengers, and the next of the same duration takes possibly 30.

Health of the labourers on the gardens.

125. The sanitary condition of the immigrants after leaving Government protection, and while at work on the gardens, has been dwelt on at greater length in successive annual reports, and their vital statistics are entered in Tables 4, 5, and 6, and explained in paragraph 10 to 14 of this report. It is unnecessary to dwell further on these figures. It is satisfactory to learn that, in the opinion of the district officers generally, the comfort and hygiene of the immigrant labouring population is being yearly improved. In Cachar, for example, the water-supply is described as better and more carefully protected, the houses are also improved, and several have iron roofs, which are much preferred by the coolies. In Sylhet, the year appears to have been particularly healthy, the mortality from cholera having been 189 only on a mean garden population of 58,644. The Deputy-Commissioner and Civil Surgeon made a prolonged inspection of the newly-opened Balisira tea-gardens in South Sylhet in March. These gardens have had a terrible mortality, but the Committee came to the opinion that it was due principally to the class of coolies employed being of unsuited race and physique The ratio of sickness has been much less both in 1886 and 1887, and good wells, good lines, and drainage have now been provided. In Lakhimpur the year was characterised by several virulent outbreaks of cholera and the ratio of mortality (44·86) was exceedingly high. On Barbarua garden 7 men, 10 women, and 8 children died from cholera; on Dinjan 10 men, 15 women, and 15 children; on Naharkotia 11 men, 9 women, and 5 children; on Hukanguri between 8th April and the 18th July there were 158 cases and 94 deaths from cholera. These gardens were all inspected by the Civil Surgeon, but his report does not put the causes of epidemic outbreaks in a very clear light. So long as medical officers persist in viewing cholera in the light of a foreign element, and are satisfied the locality of an epidemic is not to be blamed, so long as the first case can be traced to some other locality, these fierce outbreaks will never cease. In Sibságar, the inspection of unhealthy gardens is a constant and important duty, and the Civil Surgeon reports that the water-supply was in some cases defective. In Nowgong, the garden labourers escaped cholera in common with the population generally; but the prevailing diseases, as heretofore, were malarial fevers, anæmic cachexia, dropsy, diarrhœa, and dysentery. Measles were also prevalent from June to November. In Darrang, Dr. Campbell reports that the sanitary condition of tea-gardens was everywhere being improved as to wells, drainage, sites, and food-supplies. In most gardens there are temporary means of segregating new arrivals, so as to watch the development of contagious diseases. In Kámrúp, the immigrant population is not large; but on the few gardens in this district there is always a high ratio of mortality.

Beri beri, or the anæmia of coolies.

126. A pamphlet on *beri beri*, or the anæmia of coolies, published by the Government of Ceylon, has attracted great attention during the year among the medical officers of tea-gardens in Assam. There seems little doubt but that the disease described in it, and called *beri beri*, is essentially the same as that commonly called anæmia and dropsy in Assam, often prevalent and very fatal in the immigrant class. I have seen it in epidemic form, affecting adults chiefly, and characterised by that peculiar dirty white and yellow tint of the eyes and tongue, a depraved appetite, general debility, and dropsical effusion. Hitherto it has been attributed to malarial cachexia, and associated with bad drainage, exposure, and climatic influences. But a careful *post-mortem* enquiry has demonstrated the presence of an intestinal parasite, the *Anchylostomum duodenale*, in all those examined, and in numbers corresponding to the severity of the symptoms during life. The primary cause therefore would be not bad air, but bad water; the development and communication of the ova being especially favoured by the condition of the water-supply in Assam, and the habits of the people, so often described, of preferring to drink from open stagnant pools and drains. My friend, Dr. Ruddock, of Meesa, near Nowgong, has been zealous and painstaking to investigate the disease in that district, and the results obtained go far to prove that the disease is, as stated, simply due to that parasite. By the administration of thymol in thirty grain doses he has almost invariably succeeded in discharging the dead parasite by hundreds, followed by a rapid restoration to health, the natural colour of the blood, and re-established nutrition. I hope Dr. Ruddock will lose no time in publishing notes of his cases. In February last I asked to be supplied with twenty copies of the pamphlet, which have been distributed to Civil Surgeons. It would be interesting to prosecute this discovery in the direction of *kála azár* or the ague cake of Goálpára; but that, I fear, is purely malarious.

127. There is one other subject on which a few words may be said with advantage before closing this section, *viz.*, the best method of avoiding the so-called introduction of cholera on tea-gardens by means of infected bodies or single individuals newly immigrated. The history of numerous garden outbreaks has long ago established the danger of permitting unrestricted communication between these new arrivals and the older hands. The present year has been marked, for the first time since State sanitary control over immigration in Assam was exercised, by a severe epidemic of cholera among this class in the depôts at Dhubri, on board the river steamers, at the debarkation depôts, and ultimately at their destination on gardens. The particulars will be given at length in the Annual Report for 1888, but it may be briefly stated here that the epidemic appears to have originated in overcrowding and detention in the depôts in Bengal, and to have been aggravated by want of sanitary supervision between leaving the recruiting districts and arrival at Dhubri. At all events, the facts are that there was a sudden rush of immigrants into Assam, and that from the latter end of January, until recruiting was authoritatively stopped early in March, the coolies arrived at Dhubri infected with cholera as a body. It was absolutely necessary that they should be pushed on at all risks to their destination without delay. The risk of diffusing cholera was advised to be much less than was supposed; whereas if they had been overcrowded in the Dhubri depôts, the result would have been a terrible mortality. Of course, the seizures and mortality continued, and many managers were thrown into a state of anxiety and perplexity by having a sudden inroad on their gardens of a gang of men, women, and children who were cholera-infected, if not developed. Happily, the results have not been so disastrous as might have taken place in an epidemic year. Cholera has not shown itself very prevalent in Assam so far during 1888, and the reports show that the introduction of many infected gangs into separate and outlying districts has not been followed by many distinct local epidemics. But on some gardens immediate unrestricted communication between the new arrivals and the old hands was followed by limited outbreaks common to both classes. Managers ought to have a strict rule that no new gangs shall be admitted to the lines until they have undergone a quarantine of more or less duration, according to cholera being present or not. This advice is in no way founded on the theory of contagion or otherwise. It is simply common sense. There is no locality occupied by a native community which can yet be said to be free from those insanitary conditions favourable to the propagation of the disease; and although much may be done to mitigate its spread, the country is still a long way from any security. The quarantine recommended has less for its object to interdict communication than that the new comers should be kept apart in the two important factors of a common water-supply and a common conservancy. It will be sufficient that each garden should have a detached barrack or two, with its own pump or well, and separate surface drainage and latrine trenches. It is by no means intended that the new hands should be subject to any privation or exposure; their food should be carefully and amply provided, the shelter should be liberal, and cleanliness insisted upon. If during their stay no disease is manifested, they can be admitted to the lines without further precautions. If cholera cases have occurred, the hands should be kept a full week after the last seizure, and the usual disinfecting precautions taken. No doubt these measures entail expense in loss of labour, in separate establishment, and capital outlay; but the results are valuable. Human life must be considered; the rapid transit of labour of the late years; and the commercial value of health as compared with sickness and death. It is not likely that I shall again have the opportunity of writing on this subject; but I feel sure it will be understood I press this question of tea-garden sanitation with acquired acknowledge and impartial judgment, and my last words are that with every advance in sanitary care for the well-being of these immigrant labourers, the less fear is there of importation, communication, contagion, and other bugbears of ignorance and neglect.

Cholera on tea-gardens

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